



CITRUS NOVEMBER FORECAST MATURITY TEST RESULTS AND FRUIT SIZE

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Florida All Orange Production Up 3 Percent from October Forecast
Florida Non-Valencia Orange Production Up 6 Percent
Florida Valencia Orange Production Unchanged
Florida All Grapefruit Production Unchanged
Florida All Tangerine and Tangelo Production Down 6 Percent
FCOJ Yield at 1.47 Gallons per Box (42° Brix) Down 1 Percent

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

Crop and State	Production ¹		2016-2017 Forecasted Production ¹	
	2014-2015 (1,000 boxes)	2015-2016 (1,000 boxes)	October (1,000 boxes)	November (1,000 boxes)
Non-Valencia Oranges ²				
Florida	47,400	36,100	34,000	36,000
California ³	39,000	45,500	42,000	42,000
Texas ³	1,170	1,351	1,000	1,000
United States	87,570	82,951	77,000	79,000
Valencia Oranges				
Florida	49,550	45,500	36,000	36,000
California ³	9,200	8,700	8,500	8,500
Texas ³	282	340	350	350
United States	59,032	54,540	44,850	44,850
All Oranges				
Florida	96,950	81,600	70,000	72,000
California ³	48,200	54,200	50,500	50,500
Texas ³	1,452	1,691	1,350	1,350
United States	146,602	137,491	121,850	123,850
Grapefruit				
Florida-All	12,900	10,800	9,600	9,600
White	3,250	2,490	2,100	2,100
Red	9,650	8,310	7,500	7,500
California ³	4,800	3,800	4,000	4,000
Texas ³	4,250	4,800	4,700	4,700
United States	21,950	19,400	18,300	18,300
Lemons ³				
California	20,600	20,500	21,000	21,000
Arizona	2,000	1,750	1,800	1,800
United States	22,600	22,250	22,800	22,800
Tangelos				
Florida	665	390	(NA)	(NA)
Tangerines and Tangelos ⁴				
Florida-All	2,265	1,415	1,650	1,550
Early ⁵	1,445	785	680	590
Royal ⁶	(NA)	(NA)	220	220
Honey	820	630	430	420
Tangelo	(NA)	(NA)	320	320
California ³	18,700	21,700	23,000	23,000
Arizona ^{3,7}	170	(NA)	(NA)	(NA)
United States	21,135	23,115	24,650	24,550

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 Estimates carried forward from October.

⁴ Includes tangelos and tangors in California. Beginning in 2016-2017, includes tangelos in Florida.

⁵ Fallglo and Sunburst varieties.

⁶ Beginning in 2016-2017, Temples have been reclassified as Royal tangerines.

⁷ Estimates discontinued in 2015-2016.

All Oranges 72.0 Million Boxes

The 2016-2017 Florida all orange forecast released today by the USDA Agricultural Statistics Board is 72.0 million boxes, increased by 2.00 million boxes from the October forecast. If realized, this forecast will be 12 percent less than last season's production and the least since the 1963-64 season of 54.9 million boxes (excludes Temples). The forecast consists of 36.0 million boxes of the non-Valencia oranges (early, midseason, and Navel varieties) and 36.0 million boxes of the Valencia oranges. Regression data used are from the 2006-2007 through 2015-2016 seasons. For those previous 10 seasons, the November forecast has deviated from final production by an average of 7 percent, with 8 seasons above and 2 below, with differences ranging from 9 percent below to 19 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 raised 2.00 million boxes to 36.0 million boxes. Current size is below the minimum and projected to be at the minimum at harvest. Current droppage is below the maximum and is projected to continue below the maximum until harvest. The Navel forecast, included in the non-Valencia forecast, is unchanged at 1.00 million boxes. Current Navel size is below average and droppage is above the maximum.

Valencia Oranges 36.0 Million Boxes

The forecast of Valencia production is unchanged at 36.0 million boxes. Current fruit size is below the average and is projected at harvest to be below average. Current droppage is near the maximum and projected to be below the maximum at harvest.

All Grapefruit 9.60 Million Boxes

The forecast of all grapefruit production is unchanged at 9.60 million boxes. The white grapefruit is unchanged at 2.10 million boxes. The red grapefruit forecast is unchanged at 7.50 million boxes. Projected fruit size of white grapefruit at harvest is below average while projected droppage is above average. Projected fruit size of red grapefruit at harvest is just above the minimum and projected droppage is above average.

Tangerines and Tangelos 1.55 Million Boxes

The forecast of tangerine and tangelo production is lowered 100,000 boxes to 1.55 million boxes. The early tangerine forecast (Fallglo and Sunburst varieties) is now at 590,000 boxes, consisting of 200,000 boxes of Fallglo tangerines and 390,000 boxes of Sunburst tangerines. Harvest of Fallglo tangerines is well underway. Fallglo final size is close to the minimum, while final droppage is higher than projected and closer to the maximum at 38 percent. Sunburst current size is close to the minimum and is projected to be close to the minimum at harvest. Sunburst droppage is projected to be above average at 28 percent. The Royal tangerine forecast is held at 220,000 boxes. The forecast of the later maturing Honey variety is lowered to 420,000 boxes. Current Honey size is below the minimum, but is projected to be just above the minimum at harvest. Projected Honey droppage at 40 percent is about average.

The forecast of tangelo production is unchanged at 320,000 boxes. Tangelo projected fruit size is below average requiring 301 pieces of fruit to fill a 90-pound box. Droppage is projected to be above average at 19 percent.

FCOJ Yield 1.47 Gallons per Box

The projection for frozen concentrated orange juice (FCOJ) is 1.47 gallons per box of 42° Brix concentrate, down 1 percent from 1.48 gallons per box in October. Last season's final yield for all oranges was 1.405527 gallons per box, as reported by the Florida Department of Citrus. Yield projections for the early-midseason and late components will be published in January. All projections of yield assume the processing relationships this season will be similar to those of the past several seasons.

Forecast Components, by Type – Florida: November 2016

[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)
ORANGES				
Early-midseason.....	20,872	766	27	303
Navel.....	1,005	219	32	139
Valencia.....	28,925	450	28	231
GRAPEFRUIT				
White.....	832	410	26	121
Red.....	3,092	393	25	124

Maturity

Regular bloom fruit samples (323 orange and 95 grapefruit) were collected from groves on established routes in Florida's five major citrus producing areas and tested in the Florida Department of Agriculture and Consumer Services, Division of Fruit and Vegetables, Florida Agricultural Statistics Service (FASS) laboratory October 24-25, 2016. All comparisons are made to November 1, 2015. Acid levels are higher on all fruit types except red grapefruit. Solids (Brix) are lower for all fruit types except white grapefruit. Ratios are lower on all fruit types. Unfinished juice per box is lower for all orange varieties, but higher for grapefruit. Solids per box are lower for all fruit types except white grapefruit. The lower table compares the Indian River fruit to that of other production areas.

Citrus Unadjusted Maturity Tests – Florida: 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 (120-120)										
Sep 1	1.26	1.39	9.14	9.26	7.33	6.79	44.82	41.39	4.09	3.83
Oct 1	0.91	0.98	9.42	9.51	10.50	9.88	52.40	47.20	4.93	4.49
Nov 1	0.75	0.80	10.30	9.90	13.89	12.49	50.41	49.81	5.19	4.93
Midseason (55-55)										
Sep 1	1.42	1.55	9.08	9.19	6.51	5.99	45.82	41.67	4.16	3.83
Oct 1	1.06	1.13	9.21	9.38	8.93	8.46	49.59	47.72	4.57	4.48
Nov 1	0.89	0.91	10.37	9.95	11.89	11.16	51.35	50.07	5.33	4.98
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
GRAPEFRUIT										
White Seedless (49-49)										
Sep 1	1.65	1.77	9.75	10.23	5.91	5.77	34.89	32.06	3.40	3.28
Oct 1	1.48	1.52	9.49	9.91	6.45	6.54	38.94	36.77	3.69	3.64
Nov 1	1.36	1.41	9.79	9.83	7.23	6.97	41.39	41.90	4.05	4.12
Red Seedless (49-46)										
Sep 1	1.58	1.71	9.74	10.15	6.19	5.97	35.29	33.28	3.44	3.37
Oct 1	1.37	1.45	9.58	9.90	7.02	6.85	42.42	36.62	4.06	3.63
Nov 1	1.29	1.29	9.97	9.71	7.74	7.59	42.44	43.30	4.23	4.21

NA Not available.

Citrus Maturity Test Averages, by Areas – Florida: November 1, 2015-2016 and 2016-2017

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										
Indian River (9-9)	0.79	0.85	10.71	10.01	13.97	12.04	45.89	50.02	4.91	5.00
Other Areas (111-111) .	0.75	0.80	10.27	9.89	13.88	12.52	50.78	49.79	5.21	4.92
Midseason										
Indian River (8-4)	1.01	(D)	10.75	(D)	10.87	(D)	51.40	(D)	5.53	(D)
Other Areas (47-51)	0.87	0.90	10.31	9.95	12.06	11.24	51.34	50.36	5.29	5.01
Late										
Indian River (29-29)	1.71	1.76	9.64	9.27	5.69	5.33	51.15	50.22	4.93	4.66
Other Areas (121-119) .	1.58	1.64	9.28	9.13	5.96	5.62	52.75	49.91	4.90	4.56
GRAPEFRUIT										
White Seedless										
Indian River (38-38)	1.37	1.44	9.88	9.98	7.24	6.96	41.11	42.13	4.07	4.20
Other Areas (11-11)	1.31	1.33	9.45	9.30	7.22	7.02	42.36	41.08	4.00	3.83
Red Seedless										
Indian River (40-39)	1.30	1.28	10.04	9.72	7.73	7.61	42.87	43.66	4.30	4.25
Other Areas (9-7)	1.24	1.29	9.64	9.64	7.80	7.51	40.55	41.27	3.90	3.98

D Withheld to avoid disclosing data for individual operations.

Citrus Size Frequency Measurement Distributions, by Type – Florida: October

[Size frequency distributions from the October 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	2014	2015	2016	Type and number of fruit per 4/5-bushel containers	2014	2015	2016
	(percent)	(percent)	(percent)		(percent)	(percent)	(percent)
NON-VALENCIA ORANGES ¹				WHITE GRAPEFRUIT ²			
64 or less	0.3	0.5	0.3	32 or less.....	1.5	0.8	0.9
80.....	2.7	2.9	2.0	36	4.8	4.1	4.7
100.....	12.3	13.4	10.1	40	9.8	6.2	7.7
125.....	28.0	27.8	21.6	48	13.7	11.8	12.6
163 or more	56.7	55.4	66.0	56	14.2	11.7	12.7
				63 or more.....	56.0	65.4	61.4
NAVEL ORANGES				RED GRAPEFRUIT			
64 or less	39.8	41.3	38.0	32 or less.....	1.9	2.0	0.8
80.....	30.5	28.4	26.0	36	4.1	5.0	4.2
100.....	17.8	18.4	18.5	40	7.9	9.5	9.2
125.....	8.0	8.6	10.2	48	13.8	15.2	14.6
163 or more	3.9	3.3	7.3	56	14.5	13.0	14.6
				63 or more.....	57.8	55.3	56.6
VALENCIA ORANGES				FALLGLO TANGERINES			
64 or less	0.3	0.5	0.8	80 or less.....	-	15.0	11.8
80.....	3.1	4.4	4.4	100	3.0	13.3	23.2
100.....	16.7	19.7	17.2	120	6.0	10.0	13.2
125.....	32.2	33.8	28.8	176	6.0	10.8	10.0
163 or more	47.7	41.6	48.8	210 or more	85.0	50.9	41.8
TANGELOS				SUNBURST TANGERINES			
80 or less	13.5	14.4	8.9	100 or less	7.0	14.0	6.0
100.....	20.0	21.6	16.9	120	14.7	20.6	7.6
120.....	19.6	20.2	20.0	176	12.8	16.6	12.4
156 or more	46.9	43.8	54.2	210 or more	65.5	48.8	74.0

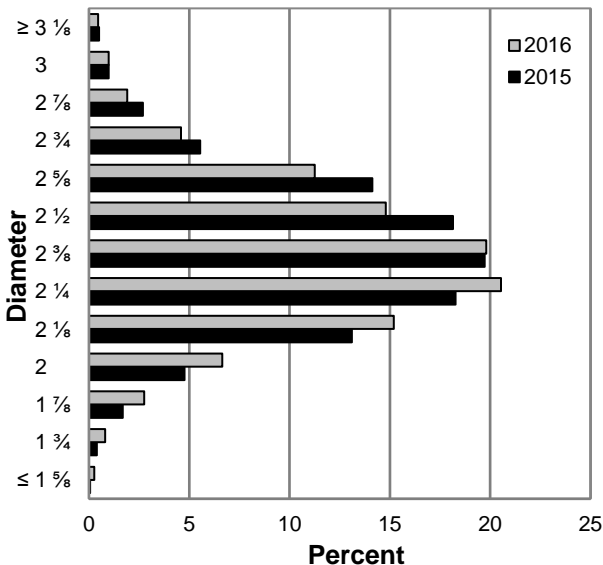
- Represents zero.

¹ Excludes Navel and Temple varieties.

² Excludes seedy.

The charts below show the distribution of fruit sizes in 2015 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 ¹, by Diameter - Florida: October



¹ Excludes Navel variety.

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

