United States Department of Agriculture
National Agricultural Statistics Service

CITRUS

NOVEMBER FORECAST
MATURITY TEST RESULTS AND FRUIT SIZE

Cooperating with the Florida Department of Agriculture and Consumer Services
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November 9, 2017

Florida All Orange Production Down 7 Percent from October Forecast
Florida Non-Valencia Orange Production Down 9 Percent
Florida Valencia Orange Production 6 Down Percent
Florida All Grapefruit Production Down 5 Percent
Florida All Tangerine and Tangelo Production Down 5 Percent

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

Crop and State	Production [1]		2017-2018 Forecasted Production [1]	
	2015-2016	2016-2017	October	November
	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)
Non-Valencia Oranges [2]				
Florida	**36,100**	**33,000**	**23,000**	**21,000**
California [3]	47,200	39,300	35,000	35,000
Texas [3]	1,351	1,090	1,350	1,350
United States	84,651	73,390	59,350	57,350
Valencia Oranges				
Florida	**45,600**	**35,750**	**31,000**	**29,000**
California [3]	11,300	11,000	11,000	11,000
Texas [3]	340	280	300	300
United States	57,240	47,030	42,300	40,300
All Oranges				
Florida	**81,700**	**68,750**	**54,000**	**50,000**
California [3]	58,500	50,300	46,000	46,000
Texas [3]	1,691	1,370	1,650	1,650
United States	141,891	120,420	101,650	97,650
Grapefruit				
Florida-All	**10,800**	**7,760**	**4,900**	**4,650**
White	**2,490**	**1,480**	**900**	**850**
Red	**8,310**	**6,280**	**4,000**	**3,800**
California [3]	3,800	4,000	4,200	4,200
Texas [3]	4,800	4,800	5,300	5,300
United States	19,400	16,560	14,400	14,150
Lemons [3]				
California	21,000	20,500	21,000	21,000
Arizona	1,600	1,650	1,600	1,600
United States	22,600	22,150	22,600	22,600
Tangelos				
Florida	**390**	**(NA)**	**(NA)**	**(NA)**
Tangerines and Tangelos				
Florida-All [4]	**1,415**	**1,620**	**1,000**	**950**
Early [5]	**785**	**600**	**(NA)**	**(NA)**
Royal [6]	**(NA)**	**210**	**(NA)**	**(NA)**
Honey	**630**	**530**	**(NA)**	**(NA)**
Tangelo	**(NA)**	**280**	**(NA)**	**(NA)**
California [3 7]	21,700	23,900	23,000	23,000
United States	23,115	25,520	24,000	23,950

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 in Florida for 2015-2016, and tangerines and mandarins in 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 2015-2016.
[3] Estimates carried forward from October.
[4] 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.
[5] Fallglo and Sunburst varieties.
[6] Beginning in 2016-2017, Temples have been reclassified as Royal tangerines.
[7] Includes tangelos and tangors in California.

All Oranges 50.0 Million Boxes

The 2017-2018 Florida all orange forecast released today by the USDA Agricultural Statistics Board is 50.0 million boxes, down 4.00 million boxes from the October forecast. If realized, this forecast will be 27 percent less than last season's production and the least since the 1945-1946 season of 49.0 million boxes. The forecast consists of 21.0 million boxes of the non-Valencia oranges (early, midseason, and Navel varieties) and 29.0 million boxes of the Valencia oranges. Regression data used are from the 2007-2008 through 2016-2017 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 21.0 Million Boxes

The forecast of non-Valencia production is lowered 2.00 million boxes to 21.0 million boxes. Current fruit size is below average and projected to be below average at harvest. Current droppage is above the maximum and is projected to be above the maximum until harvest. The Navel forecast, included in the non-Valencia forecast, is unchanged at 600 thousand boxes, and is 3 percent of the non-Valencia total. Current Navel size is above the maximum, and droppage is above the maximum.

Valencia Oranges 29.0 Million Boxes

The forecast of Valencia production is reduced 2.00 million boxes to 29.0 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 lowered 250 thousand boxes to 4.65 million boxes. If realized, this forecast will be 40 percent less than last season's production and the least since the 1918-1919 season of 3.50 million boxes. The white grapefruit forecast is lowered 50 thousand boxes to 850 thousand. The red grapefruit forecast is lowered 200 thousand boxes and is now at 3.80 million boxes. Projected fruit size of white grapefruit at harvest is below average while projected droppage is above the maximum. Projected fruit size of red grapefruit at harvest is projected to be above average and projected droppage is projected to be above the maximum.

Tangerines and Tangelos 950 Thousand Boxes

The forecast for the tangerine and tangelos is reduced 50 thousand boxes to 950 thousand, 41 percent less than last season's production. This forecast number includes all certified tangerine and tangelo varieties.

Forecast Components, by Type – Florida: November 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	19,569	741	56	287
Navel	913	252	59	137
Valencia	28,390	510	51	237
GRAPEFRUIT				
White	722	396	62	109
Red	2,834	385	64	111

Maturity

Regular bloom fruit samples (322 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 30 - November 1, 2017. All comparisons are made to November 1, 2016. Acid levels and solids (brix) are lower on all fruit types, ratios are higher. Unfinished juice per box is higher for all for all varieties; solids per box are higher for all fruit types except late oranges. The table at the bottom of the page compares the Indian River fruit to that of other production areas.

Unadjusted Maturity Tests – Florida: 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)
ORANGES										
Early (120-117)										
Sep 1	1.39	1.17	9.26	9.10	6.79	7.96	41.39	43.84	3.83	3.99
Oct 1	0.98	0.88	9.51	9.22	9.88	10.72	47.20	49.19	4.49	4.53
Nov 1	0.80	0.69	9.90	9.48	12.49	13.95	49.81	52.65	4.93	4.99
Midseason (55-55)										
Sep 1	1.55	1.27	9.19	8.97	5.99	7.22	41.67	44.70	3.83	4.01
Oct 1	1.13	0.95	9.38	9.38	8.46	10.05	47.72	51.51	4.48	4.84
Nov 1	0.91	0.76	9.95	9.85	11.16	13.19	50.07	54.28	4.98	5.34
Late (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
GRAPEFRUIT										
White Seedless (49-47)										
Sep 1	1.77	1.53	10.23	9.75	5.77	6.39	32.06	36.95	3.28	3.60
Oct 1	1.52	1.34	9.91	9.51	6.54	7.12	36.77	43.93	3.64	4.18
Nov 1	1.41	1.25	9.83	9.47	6.97	7.61	41.90	48.68	4.12	4.62
Red Seedless (46-48)										
Sep 1	1.71	1.43	10.15	9.84	5.97	6.88	33.28	36.95	3.37	3.64
Oct 1	1.45	1.28	9.90	9.55	6.85	7.50	36.62	43.62	3.63	4.16
Nov 1	1.29	1.15	9.71	9.29	7.59	8.13	43.30	48.31	4.21	4.49

NA Not available.

Maturity Test Averages, by Areas – Florida: November 1, 2016-2017 and 2017-2018

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)
ORANGES										
Early										
Indian River (9-9)	0.85	0.76	10.01	9.56	12.04	12.74	50.02	52.02	5.00	4.95
Other Areas (111-108)	0.80	0.68	9.89	9.48	12.52	14.06	49.79	52.71	4.92	5.00
Midseason										
Indian River (4-2)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other Areas (51-53)	0.90	0.76	9.95	9.85	11.24	13.18	50.36	54.37	5.01	5.35
Late										
Indian River (29-29)	1.76	1.74	9.27	9.23	5.33	5.32	50.22	51.16	4.66	4.73
Other Areas (119-121)	1.64	1.49	9.13	8.70	5.62	5.93	49.91	51.88	4.56	4.52
GRAPEFRUIT										
White Seedless										
Indian River (38-36)	1.44	1.25	9.98	9.63	6.96	7.75	42.13	48.65	4.20	4.69
Other Areas (11-11)	1.33	1.25	9.30	8.97	7.02	7.19	41.08	48.76	3.83	4.38
Red Seedless										
Indian River (39-40)	1.28	1.14	9.72	9.26	7.61	8.16	43.66	48.43	4.25	4.48
Other Areas (7-8)	1.29	1.19	9.64	9.43	7.51	7.99	41.27	47.70	3.98	4.51

D Withheld to avoid disclosing data for individual operations.

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	2015	2016	2017
	(percent)	(percent)	(percent)
NON-VALENCIA ORANGES [1]			
64 or less	0.5	0.3	0.2
80	2.9	2.0	2.3
100	13.4	10.1	12.9
125	27.8	21.6	31.2
163 or more	55.4	66.0	53.4
NAVEL ORANGES			
64 or less	41.3	38.0	43.5
80	28.4	26.0	29.1
100	18.4	18.5	20.6
125	8.6	10.2	5.3
163 or more	3.3	7.3	1.5
VALENCIA ORANGES			
64 or less	0.5	0.8	0.5
80	4.4	4.4	3.4
100	19.7	17.2	16.4
125	33.8	28.8	30.7
163 or more	41.6	48.8	49.0
TANGELOS			
80 or less	14.4	8.9	7.5
100	21.6	16.9	23.9
120	20.2	20.0	20.7
156 or more	43.8	54.2	47.9

Type and number of fruit per 4/5–bushel containers	2015	2016	2017
	(percent)	(percent)	(percent)
WHITE GRAPEFRUIT [2]			
32 or less	0.8	0.9	2.8
36	4.1	4.7	7.2
40	6.2	7.7	12.4
48	11.8	12.6	18.4
56	11.7	12.7	15.7
63 or more	65.4	61.4	43.5
RED GRAPEFRUIT			
32 or less	2.0	0.8	2.0
36	5.0	4.2	7.7
40	9.5	9.2	10.9
48	15.2	14.6	15.4
56	13.0	14.6	14.5
63 or more	55.3	56.6	49.5
FALLGLO TANGERINES			
80 or less	15.0	11.8	14.3
100	13.3	23.2	19.3
120	10.0	13.2	25.0
176	10.8	10.0	12.1
210 or more	50.9	41.8	29.3
SUNBURST TANGERINES			
100 or less	14.0	6.0	12.3
120	20.6	7.6	21.3
176	16.6	12.4	13.0
210 or more	48.8	74.0	53.4

[1] Excludes Navels.
[2] Excludes seedy.

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