



CITRUS APRIL FORECAST

MATURITY TEST RESULTS AND FRUIT SIZE

Cooperating with the Florida Department and Agriculture and Consumer Services
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April 11, 2017

Florida All Orange Production Unchanged from March
Florida Non-Valencia Orange Production Unchanged
Florida Valencia Orange Production Unchanged
Florida All Grapefruit Production Down 9 Percent
Florida All Tangerine and Tangelo Production Up 10 Percent
FCOJ Yield at 1.42 Gallons per Box (42° Brix)

FORECAST DATES	-	2016-2017 SEASON
May 10, 2017		June 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)	March (1,000 boxes)	April (1,000 boxes)
Non-Valencia Oranges ²				
Florida	47,400	36,100	33,000	33,000
California	39,000	* 47,200	44,000	43,000
Texas	1,170	1,351	1,450	1,050
United States.....	87,570	* 84,651	78,450	77,050
Valencia Oranges				
Florida	49,550	* 45,600	34,000	34,000
California	9,200	* 11,300	7,800	8,000
Texas	282	340	350	320
United States.....	59,032	* 57,240	42,150	42,320
All Oranges				
Florida	96,950	* 81,700	67,000	67,000
California	48,200	* 58,500	51,800	51,000
Texas	1,452	1,691	1,800	1,370
United States.....	146,602	* 141,891	120,600	119,370
Grapefruit				
Florida-All	12,900	10,800	8,900	8,100
White	3,250	2,490	1,700	1,500
Red	9,650	8,310	7,200	6,600
California	4,800	3,800	4,100	3,800
Texas	4,250	4,800	5,300	4,700
United States.....	21,950	19,400	18,300	16,600
Lemons				
California.....	20,600	* 20,900	20,000	19,000
Arizona.....	2,000	1,750	1,550	1,700
United States.....	22,600	* 22,650	21,550	20,700
Tangelos				
Florida	665	390	(NA)	(NA)
Tangerines and Tangelos ³				
Florida-All	2,265	1,415	1,490	1,640
Early ⁴	1,445	785	600	600
Royal ⁵	(NA)	(NA)	220	240
Honey	820	630	390	520
Tangelo	(NA)	(NA)	280	280
California	18,700	* 21,600	23,000	22,000
Arizona ⁶	170	(NA)	(NA)	(NA)
United States.....	21,135	* 23,015	24,490	23,640

* Revised.

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.

Regressions

Regression data used are from the 2006-2007 through 2015-2016 seasons. All references to “average”, “minimum”, and “maximum” refer to these 10 seasons unless noted.

All Oranges 67.0 Million Boxes

The 2016-2017 Florida all orange forecast released today by the USDA Agricultural Statistics Board is unchanged at 67.0 million boxes. The total includes 33.0 million boxes of the non-Valencia oranges (early, midseason, and Navel varieties) and 34.0 million boxes of Valencia oranges. For the previous 10 seasons used in the regressions, the April all orange forecast has deviated from final production by an average of 3 percent, with 5 seasons above and 5 below, and differences ranging from 7 percent below to 5 percent above.

Non-Valencia Oranges 33.0 Million Boxes

The forecast of non-Valencia production remains at 33.0 million boxes. The Row Count survey conducted March 29-30, 2017, showed 99 percent of the early-midseason rows are harvested. Non-Valencia estimated utilization to April 1, with an allocation for non-certified fruit, is 32.9 million boxes. The Navel forecast, included in the non-Valencia portion of the forecast, is lowered by 50,000 boxes at 800,000 boxes, 2 percent of the non-Valencia total.

Valencia Oranges 34.0 Million Boxes

The forecast of Valencia production remains at 34.0 million boxes. Final fruit size is close to the minimum, requiring 242 pieces to fill a 90-pound box. The survey indicated final droppage at 30 percent, slightly below the maximum. The Row Count survey showed 28 percent of the Valencia rows are harvested.

All Grapefruit 8.10 Million Boxes

The forecast of all grapefruit production is lowered 800,000 boxes to 8.10 million boxes. Changes were made in both the white and red grapefruit forecasts. The white grapefruit forecast is lowered 200,000 boxes 1.50 million, and the red grapefruit forecast is lowered 600,000 boxes to 6.60 million. Estimated utilization to April 1, with an allocation for non-certified use, of white grapefruit is 1.42 million boxes and red grapefruit is 6.24 million boxes. The Row Count survey conducted March 29-30, 2017, indicated 94 percent of both the white and the red grapefruit rows are harvested.

Tangerines and Tangelos 1.64 Million Boxes

The forecast of early tangerine varieties (Fallglo and Sunburst) is final at 600,000 boxes with 225,000 boxes of Fallglo tangerines and 375,000 boxes of Sunburst tangerines. Harvest is complete for these varieties this season. The Royal tangerine forecast is raised 20,000 boxes to 240,000 boxes.

The later maturing Honey tangerine forecast is raised 130,000 boxes to 520,000 boxes. Estimated utilization to April 1, with an allocation of non-certified use is 478,000 boxes. The Row Count Survey conducted March 29-30, 2017 indicated 79 percent of the Honey tangerine rows were harvested.

The tangelo portion of the all tangerine forecast remains at 280,000 boxes. Estimated utilization to April 1 is 277,000 boxes, which includes an allocation for non-certified fruit. The Row Count survey showed 95 percent of the tangelo rows are harvested.

FCOJ Yield 1.42 Gallons per Box

The projection for frozen concentrated orange juice (FCOJ) is lowered to 1.42 gallons per box of 42° Brix concentrate. Projections for the late (Valencia) portion is unchanged 1.54 gallons per box. The final yield for non-Valencia oranges is 1.336596 gallons per box as reported by the Florida Department of Citrus (FDOC) in Report No. 21. Last season’s final yields, as reported by the Florida Department of Citrus were: 1.405527 gallons per box for all oranges, 1.347046 gallons per box for non-Valencia oranges, and 1.472983 gallons per box for late (Valencia) oranges.

Forecast Components, by Type – Florida: April 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 (1,000 trees)	Fruit per tree (number)	Droppage (percent)	Fruit per box (number)
ORANGES				
Early-midseason.....	20,872	766	26	317
Navel.....	1,005	219	27	144
Valencia.....	28,925	450	30	242
GRAPEFRUIT				
White.....	832	410	44	143
Red.....	3,092	393	36	132

Maturity Tests

Regular bloom fruit samples were collected from groves on established routes March 29-30, 2017 in Florida's five major citrus producing areas, and tested March 31, 2017. Only late oranges were collected for this month's testing. Acid level and solids (Brix) are higher than last season, ratios are lower. Unfinished juice per box is lower than last season, while solids per box are higher than last season.

Fruit from the Indian River District have a higher acid level and solids (Brix) compared to fruit from other areas, with a lower ratio. Unfinished juice per box and solids per box are higher in fruit from the Indian River District than fruit from other 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)		Solids/Acid		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)	(ratio)	(ratio)	(pounds)	(pounds)	(pounds)	(pounds)
LATE ORANGES (81- 116)										
Oct 1.....	1.95	2.00	8.61	8.84	4.46	4.50	48.37	45.84	4.16	4.05
Nov 1.....	1.63	1.67	9.34	9.17	5.77	5.55	52.40	50.00	4.89	4.59
Dec 1.....	1.33	1.43	9.74	10.10	7.40	7.11	54.77	52.48	5.33	5.30
Jan 1.....	1.05	1.24	10.26	10.83	9.85	8.87	57.08	54.04	5.86	5.85
Feb 1.....	0.99	1.08	10.67	11.46	10.88	10.68	56.19	55.79	5.99	6.40
Mar 1.....	0.89	1.00	11.32	11.89	12.86	11.97	56.38	54.39	6.38	6.47
Apr 1.....	0.81	0.87	11.64	12.08	14.60	14.04	56.29	55.26	6.55	6.68

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

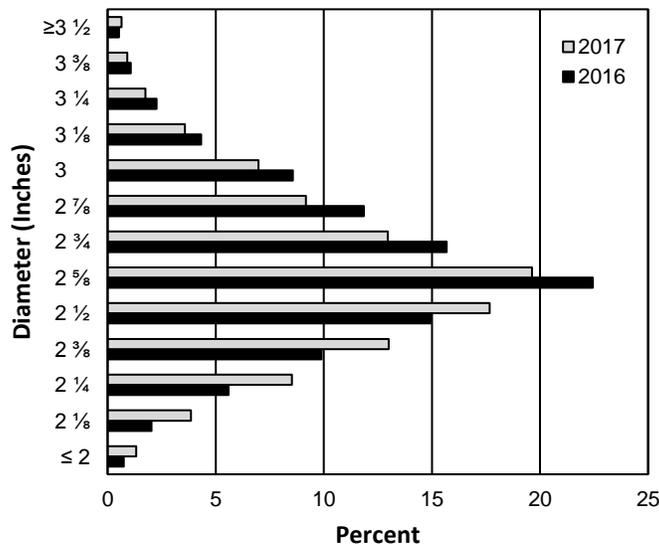
Fruit type (number of groves)	Acid		Solids (Brix)		Solids/Acid		Unfinished juice per box		Solids per box	
	2015-2016	2016-2017	2015-2016	2016-2017	2015-2016	2016-2017	2015-2016	2016-2017	2015-2016	2016-2017
	(percent)	(percent)	(percent)	(percent)	(ratio)	(ratio)	(pounds)	(pounds)	(pounds)	(pounds)
LATE ORANGES										
Indian River (16-20).....	0.79	0.89	12.04	12.29	15.26	13.96	56.32	55.86	6.77	6.85
Other Areas (65-96).....	0.81	0.86	11.54	12.03	14.44	14.06	56.29	55.14	6.50	6.65

Fruit Size Comparisons to Previous Seasons

Size frequency distributions from the March size survey are shown in the table below. 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.

The chart to the right shows the distribution of fruit sizes in 2017 compared to 2016. The diameter measurements shown are the minimum values of fruit measured, except for the smallest value.

Fruit Size Frequency Measurements, Valencia Oranges, by Diameter – Florida: March



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

Type and number of fruit per 4/5 – bushel containers	2015	2016	2017
	(percent)	(percent)	(percent)
VALENCIA ORANGES			
64 or less.....	3.1	5.8	5.1
80.....	12.3	16.3	12.8
100.....	29.4	32.2	26.7
125.....	32.2	27.4	28.7
163 or more.....	23.0	18.3	26.7