



# CITRUS NOVEMBER FORECAST MATURITY TEST RESULTS AND FRUIT SIZE

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November 8, 2019

**Florida All Orange Production 74.0 Million Boxes**  
**Florida Non-Valencia Orange Production 32.0 Million Boxes**  
**Florida Valencia Orange Production 42.0 Million Boxes**  
**Florida All Grapefruit Production 4.60 Million Boxes**  
**Florida All Tangerine and Tangelo Production 1.05 Million Boxes**

FORECAST DATES	2018-2019 SEASON
December 10, 2019	April 9, 2020
January 10, 2020	May 12, 2020
February 11, 2020	June 11, 2020
March 10, 2020	July 10, 2020

## Citrus Production by Type – States and United States

Crop and State	Production <sup>1</sup>			Forecasted Production <sup>1 2</sup>
	2016-2017 (1,000 boxes)	2017-2018 (1,000 boxes)	2018-2019 (1,000 boxes)	2019-2020 (1,000 boxes)
<b>Non-Valencia Oranges <sup>3</sup></b>				
<b>Florida</b> .....	<b>33,000</b>	<b>18,950</b>	<b>30,400</b>	<b>32,000</b>
California .....	39,300	35,900	40,800	38,000
Texas .....	1,090	1,530	2,210	2,050
United States.....	73,390	56,380	73,410	72,050
<b>Valencia Oranges</b>				
<b>Florida</b> .....	<b>35,850</b>	<b>26,100</b>	<b>41,350</b>	<b>42,000</b>
California .....	9,000	8,300	9,000	9,000
Texas .....	280	350	290	650
United States.....	45,130	34,750	50,640	51,650
<b>All Oranges</b>				
<b>Florida</b> .....	<b>68,850</b>	<b>45,050</b>	<b>71,750</b>	<b>74,000</b>
California .....	48,300	44,200	49,800	47,000
Texas .....	1,370	1,880	2,500	2,700
United States.....	118,520	91,130	124,050	123,700
<b>Grapefruit</b>				
<b>Florida-All</b> .....	<b>7,760</b>	<b>3,880</b>	<b>4,510</b>	<b>4,600</b>
<b>Red</b> .....	<b>6,280</b>	<b>3,180</b>	<b>3,740</b>	<b>3,900</b>
<b>White</b> .....	<b>1,480</b>	<b>700</b>	<b>770</b>	<b>700</b>
California .....	4,400	3,800	3,200	4,200
Texas .....	4,800	4,800	6,100	5,700
United States.....	16,960	12,480	13,810	14,500
<b>Lemons</b>				
Arizona.....	1,550	1,000	1,350	1,400
California.....	20,500	21,200	22,800	20,000
United States.....	22,050	22,200	24,150	21,400
<b>Tangerines and Tangelos</b>				
<b>Florida</b> <sup>4</sup> .....	<b>1,620</b>	<b>750</b>	<b>990</b>	<b>1,050</b>
California <sup>5</sup> .....	23,800	19,200	26,000	23,000
United States.....	25,420	19,950	26,990	24,050

NA Not available.

<sup>1</sup> Net pounds per box: oranges in California-80, Florida-90, Texas-85; grapefruit in California and Texas-80, Florida-85; lemons-80; tangerines and mandarins in California-80, Florida-95.

<sup>2</sup> Estimates carried forward from October

<sup>3</sup> Navel and miscellaneous varieties in California; Early non-Valencia (including Navel) and midseason non-Valencia varieties in Florida; Early and mid-season varieties in Texas.

<sup>4</sup> 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.

<sup>5</sup> Includes tangelos and tangors in California.

## All Oranges 74.0 Million Boxes

The 2019-2020 Florida all orange forecast released today by the USDA Agricultural Statistics Board is carried forward from October at 74.0 million boxes, 3 percent more than last season's final production. The total includes 32.0 million boxes of non-Valencia oranges (early, midseason, and Navel varieties) and 42.0 million boxes of Valencia oranges. The Navel orange forecast, at 800 thousand boxes, accounts for 3 percent of the non-Valencia total. The estimated number of bearing trees for all oranges is 50.1 million, up 1 percent from the previous season.

## All Grapefruit 4.60 Million Boxes

The forecast of all grapefruit production is carried forward at 4.60 million boxes, 2 percent more than last season's utilization of 4.51 million boxes, but up 19 percent up from the 2017-2018 season. The total is comprised of 3.90 million boxes of red grapefruit and 700 thousand boxes of white grapefruit. All grapefruit bearing trees are estimated to be 2.51 million, down 14 percent from the previous season.

## Tangerines and Tangelos Total 1.05 Million Boxes

The forecast for tangerine and tangelos is carried forward at 1.05 million boxes, 6 percent more than last season's utilization of 990 thousand boxes. This forecast number includes all certified tangerine and tangelo varieties

## Weather and Field Conditions

Daily temperatures during October were typical for this time of year, with highs mostly the mid-80s to low 90s. Rainfall amounts varied across the citrus producing region, ranging from two and a half inches in the Southern citrus growing area, to over seven inches in the Northern and Central citrus growing areas. According to the October 31, 2019 drought monitor, portions of the Southern citrus growing area are abnormally dry. The remainder of the citrus growing region is drought free. Grove activities included mowing, applying herbicides, fertilizing, and general grove maintenance. Irrigation is being run several times a week in most areas.

## Crop Progress

The crop season in October began with the harvesting of Navel and Hamlin oranges; red grapefruit; and Fallglo and Early Pride tangerines. Fruit being harvested was primarily for the fresh market. By the end of October, two processing plants were open for eliminations and nine packinghouses were shipping fruit. According to the Florida Department of Fruit and Vegetables, through October 27, 2019, less than 1 percent of the early and midseason oranges, 3 percent of the Navels, 3 percent of all grapefruit, and 5 percent of tangerines and tangelos have been certified.

## Estimates of Production by Marketing Districts

Production forecasts for Florida oranges and grapefruit have been divided among marketing districts for this report. Comparisons are shown to the previous season in the table below. Marketing District II is the legally defined Indian River District along the East Coast. Marketing District III (Gulf) includes the counties of Charlotte, Collier, Glades, Hendry, and Lee. Marketing District I (Florida SunRidge) includes all other citrus-producing counties.

## Citrus Production and Prorated Forecast, by Marketing District – 2018-2019 and 2019-2020

[Based on tree populations. The possible differences between growing areas, concerning average fruit size, loss from droppage, and harvest patterns can alter the prorated estimates]

Marketing District	Oranges				Seedless Grapefruit			
	Non-Valencia		Valencia		Red		White	
	2018-2019	2019-2020	2018-2019	2019-2020	2018-2019	2019-2020	2018-2019	2019-2020
	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)				
Indian River .....	754	500	1,651	1,900	2,903	2,700	661	600
Gulf .....	7,354	8,700	11,847	12,900	469	600	23	(Z)
Florida SunRidge.....	22,292	22,800	27,852	27,200	368	600	86	100
Florida Total .....	30,400	32,000	41,350	42,000	3,740	3,900	770	700

Z Less than half of the unit shown

## Maturity

Regular bloom fruit samples (324 orange and 98 grapefruit) were collected from groves on established routes in Florida's five major citrus producing areas and tested by the Florida Agricultural Statistics Service (FASS) on October 30 to November 1, 2019. All comparisons are made to November 1, 2018. Acid levels are lower on all fruit types except red grapefruit. Solids (brix) and ratios are higher on all fruit types. Unfinished juice per box is higher on all fruit types except red grapefruit. Solids per box are higher on all fruit types. The table at the bottom of the page compares Indian River fruit to that of other production areas.

### Unadjusted Maturity Tests – Florida: 2018-2019 and 2019-2020

[Averages of regular bloom fruit from sample groves. Juice and solids per box are unadjusted and not comparable to juice processing plant test results. 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	
	2018-2019	2019-2020	2018-2019	2019-2020	2018-2019	2019-2020	2018-2019	2019-2020	2018-2019	2019-2020
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
<b>ORANGES</b>										
Early N-V (120-119)										
Sep 1 .....	1.19	1.21	8.84	9.06	7.51	7.59	43.68	45.13	3.86	4.09
Oct 1 .....	0.86	0.89	9.22	9.69	10.94	11.05	49.09	49.57	4.52	4.80
Nov 1 .....	0.69	0.64	9.75	10.26	14.36	16.08	50.27	51.37	4.90	5.27
Midseason N-V (55-55)										
Sep 1 .....	1.32	1.37	8.93	9.04	6.84	6.71	44.64	45.55	3.99	4.12
Oct 1 .....	0.94	1.04	9.31	9.76	10.02	9.54	49.78	49.37	4.64	4.81
Nov 1 .....	0.80	0.76	10.00	10.34	12.84	13.86	50.84	51.62	5.08	5.34
Valencia (150-150)										
Sep 1 .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Oct 1 .....	1.90	1.97	8.56	9.08	4.54	4.68	46.30	47.73	3.96	4.33
Nov 1 .....	1.52	1.47	9.15	9.48	6.11	6.57	49.87	51.73	4.56	4.90
<b>GRAPEFRUIT</b>										
Red Seedless (50-50)										
Sep 1 .....	1.44	1.53	9.72	10.10	6.79	6.63	38.91	39.41	3.79	3.98
Oct 1 .....	1.22	1.31	9.48	10.21	7.80	7.84	44.99	46.18	4.26	4.71
Nov 1 .....	1.16	1.19	10.00	10.39	8.69	8.80	50.27	49.16	5.02	5.11
White Seedless (50-48)										
Sep 1 .....	1.53	1.63	9.84	10.33	6.45	6.36	36.37	38.82	3.58	4.01
Oct 1 .....	1.36	1.41	9.61	10.37	7.10	7.40	42.63	45.99	4.10	4.77
Nov 1 .....	1.26	1.25	9.75	10.10	7.79	8.13	48.13	49.55	4.69	5.00

NA Not available.

### Unadjusted Maturity Test Averages, by Areas – Florida: November 2017-2018 and 2018-2019

Fruit type (number of groves) test date	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	2018-2019	2019-2020	2018-2019	2019-2020	2018-2019	2019-2020	2018-2019	2019-2020	2018-2019	2019-2020
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
<b>ORANGES</b>										
Early N-V										
Indian River (9-9) .....	0.73	0.71	10.03	10.86	13.88	15.35	47.58	51.17	4.77	5.54
Other Areas <sup>1</sup> (111-110)	0.68	0.64	9.73	10.21	14.39	16.14	50.49	51.39	4.91	5.25
Midseason N-V										
Indian River (2-2) .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other Areas <sup>1</sup> (53-53) .....	0.80	0.76	10.00	10.31	12.84	13.87	50.82	51.65	5.08	5.32
Valencia										
Indian River (29-29) .....	1.72	1.67	9.48	9.95	5.56	6.00	47.22	52.05	4.47	5.18
Other Areas <sup>1</sup> (121-121)	1.47	1.42	9.07	9.37	6.24	6.70	50.50	51.66	4.58	4.84
<b>GRAPEFRUIT</b>										
Red Seedless										
Indian River (42-42) .....	1.14	1.21	9.99	10.47	8.83	8.71	50.83	49.16	5.07	5.15
Other Areas <sup>1</sup> (8-8) .....	1.27	1.08	10.06	9.94	8.01	9.28	47.34	49.12	4.76	4.89
White Seedless										
Indian River (42-42) .....	1.25	1.25	9.84	10.14	7.87	8.15	48.41	49.58	4.76	5.03
Other Areas <sup>1</sup> (8-6) .....	1.26	1.25	9.26	9.87	7.36	8.00	46.66	49.35	4.31	4.83

D Withheld to avoid disclosing data for individual operations.

<sup>1</sup> Includes Central, Northern, Southern, and Western areas.

## 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]

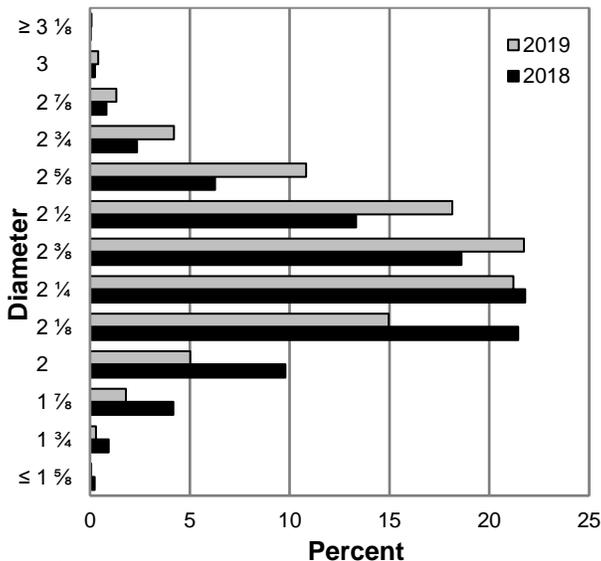
Type and number of fruit per 4/5-bushel containers	2017	2018	2019	Type and number of fruit per 4/5-bushel containers	2017	2018	2019
	(percent)	(percent)	(percent)		(percent)	(percent)	(percent)
<b>NON-VALENCIA ORANGES <sup>1</sup></b>				<b>RED GRAPEFRUIT</b>			
64 or less .....	0.2	0.0	0.1	32 or less.....	2.0	0.6	1.1
80.....	2.3	0.6	0.8	36.....	7.7	1.9	4.1
100.....	12.9	4.7	8.8	40.....	10.9	5.4	7.6
125.....	31.2	17.7	25.3	48.....	15.4	9.8	13.3
163 or more.....	53.4	77.0	65.0	56.....	14.5	12.2	14.4
				63 or more.....	49.5	70.1	59.5
<b>NAVEL ORANGES</b>				<b>WHITE GRAPEFRUIT <sup>2</sup></b>			
64 or less .....	43.5	34.4	43.5	32 or less.....	2.8	1.2	1.3
80.....	29.1	27.6	29.1	36.....	7.2	4.4	8.8
100.....	20.6	20.6	19.2	40.....	12.4	8.3	11.3
125.....	5.3	11.0	6.6	48.....	18.4	14.3	15.9
163 or more.....	1.5	6.4	1.6	56.....	15.7	12.5	19.1
				63 or more.....	43.5	59.3	43.6
<b>VALENCIA ORANGES</b>				<b>FALLGLO TANGERINES</b>			
64 or less .....	0.5	0.1	0.1	80 or less.....	14.3	14.6	8.5
80.....	3.4	0.8	1.4	100.....	19.3	13.5	28.5
100.....	16.4	7.7	11.9	120.....	25.0	19.2	22.0
125.....	30.7	23.3	30.5	176.....	12.1	6.9	17.0
163 or more.....	49.0	68.1	56.1	210 or more.....	29.3	45.8	24.0
<b>TANGELOS</b>				<b>SUNBURST TANGERINES</b>			
80 or less .....	7.5	2.1	16.8	100 or less.....	12.3	0.4	4.1
100.....	23.9	11.2	22.7	120.....	21.3	9.6	11.8
120.....	20.7	22.1	23.2	176.....	13.0	8.8	14.6
156 or more.....	47.9	64.6	37.3	210 or more.....	53.4	81.2	69.5

<sup>1</sup> Excludes Navels.

<sup>2</sup> Excludes seedy.

The charts below show the distribution of fruit sizes in 2018 compared to 2019. 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 <sup>1</sup>, by Diameter - Florida: October**



<sup>1</sup> Excludes Navels.

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

