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, 2021

Florida All Orange Production 47.0 Million Boxes
Florida Non-Valencia Orange Production 19.0 Million Boxes
Florida Valencia Orange Production 28.0 Million Boxes
Florida All Grapefruit Production 3.80 Million Boxes
Florida All Tangerine and Tangelo Production 900,000 Boxes

FORECAST DATES – 2021-2022 SEASON

December 9, 2021	April 8, 2022
January 12, 2022	May 12, 2022
February 9, 2022	June 10, 2022
March 9, 2022	July 12, 2022

Citrus Production by Type – States and United States

Crop and State	Production [1]			Forecasted Production [1 2]
	2018-2019	2019-2020	2020-2021	2021-2022
	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)
Non-Valencia Oranges [3]				
Florida	**30,400**	**29,650**	**22,700**	**19,000**
California	42,000	43,300	40,600	35,000
Texas	2,210	1,150	1,000	450
United States	74,610	74,100	64,300	54,450
Valencia Oranges				
Florida	**41,450**	**37,750**	**30,100**	**28,000**
California	10,200	10,800	9,500	8,500
Texas	290	190	50	100
United States	51,940	48,740	39,650	36,600
All Oranges				
Florida	**71,850**	**67,400**	**52,800**	**47,000**
California	52,200	54,100	50,100	43,500
Texas	2,500	1,340	1,050	550
United States	126,550	122,840	103,950	91,050
Grapefruit				
Florida-All	**4,510**	**4,850**	**4,100**	**3,800**
Red	**3,740**	**4,060**	**3,480**	**3,200**
White	**770**	**790**	**620**	**600**
California [4]	4,200	4,700	3,900	3,900
Texas	6,100	4,400	2,400	3,100
United States	14,810	13,950	10,400	10,800
Lemons				
Arizona	1,350	1,800	800	1,300
California	23,700	25,300	21,300	21,000
United States	25,050	27,100	22,100	22,300
Tangerines and Tangelos				
Florida	**990**	**1,020**	**890**	**900**
California	26,500	22,400	28,100	21,000
United States	27,490	23,420	28,990	21,900

[1] 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.
[2] Estimates carried forward from October
[3] Early non-Valencia (including Navel) and midseason non-Valencia varieties in Florida; Navel and miscellaneous varieties in California; Early and mid-season varieties in Texas.
[4] Includes pummelos in California.

All Oranges 47.0 Million Boxes

The 2021-2022 Florida all orange forecast released today by the USDA Agricultural Statistics Board is carried forward from October at 47.0 million boxes, down 11 percent from last season's final production. The total includes 19.0 million boxes of non-Valencia oranges (early, midseason, and Navel varieties) and 28.0 million boxes of Valencia oranges. The Navel orange forecast, at 450,000 boxes, accounts for 2 percent of the non-Valencia total. The estimated number of bearing trees for all oranges is 49.4 million.

All Grapefruit 3.80 Million Boxes

The forecast of all grapefruit production is carried forward at 3.80 million boxes, 7 percent less than last season's utilization of 4.10 million boxes. The total is comprised of 3.20 million boxes of red grapefruit and 600,000 boxes of white grapefruit.

Tangerines and Tangelos Total 900,000 Boxes

The forecast for tangerine and tangelos is carried forward at 900,000 boxes, 1 percent more than last season's utilization of 890,000 boxes. This forecast number includes all certified tangerine and tangelo varieties

Weather and Field Conditions

Daily temperatures during October were average or above for this time of year, with highs mostly in the mid-80's to the low 90's. Rainfall amounts varied widely across the citrus producing region, ranging anywhere from just over an inch to nearly four and a half inches. According to the October 28, 2021, U.S. Drought Monitor, abnormally dry conditions began to form along the upper Indian River area and adjacent counties in response to the continued lack of adequate rainfall. The rest of citrus growing region was drought free. Grove activities included mowing, fertilizing, applying fungicides and herbicides, pollenating, nutritional and pesticide spraying, discing of row middles, dead tree removal, new tree planting, and general grove maintenance, including ditch clean-out.

Crop Progress

The crop season in October began with harvesting of Navel and Hamlin oranges, red grapefruit, and Fallglo and Early Pride tangerines. Harvested fruit was primarily for the fresh market. By the end of October, two processing plants were open for eliminations and thirteen packinghouses were shipping fruit. According to the Citrus Administrative Committee Utilization Report, dated October 24, 2021, less than 1 percent of early and midseason oranges (excluding Navels), 5 percent of Navel oranges, 2 percent of all grapefruit, and 8 percent of tangerines and tangelos have been certified.

Estimates of Production by Marketing Districts

Production forecasts for Florida oranges and grapefruit were 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 – 2020-2021 and 2021-2022

[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	
	2020-2021	2021-2022	2020-2021	2021-2022	2020-2021	2021-2022	2020-2021	2021-2022
	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)
Indian River.....	866	450	1,464	1,400	2,710	2,300	573	550
Gulf.....	4,150	4,500	7,387	7,150	431	500	14	-
Florida SunRidge.....	17,684	14,050	21,249	19,450	339	400	33	50
Florida Total.....	22,700	19,000	30,100	28,000	3,480	3,200	620	600

- Represents zero.

Maturity

Regular bloom fruit samples (322 orange and 100 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 27-29, 2021. All comparisons are made to November 1, 2020. Acid levels are higher on all types, while solids (Brix) are higher on all types except midseason non-Valencia oranges. Ratios were lower across all types. Unfinished juice per box and solids per box are higher only on white grapefruit. The table at the bottom of the page compares Indian River fruit to that of other production areas.

Unadjusted Maturity Tests – Florida: 2019-2020 and 2020-2021

[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	
	2020-2021	2021-2022	2020-2021	2021-2022	2020-2021	2021-2022	2020-2021	2021-2022	2020-2021	2021-2022
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
ORANGES										
Early N-V (116-119)										
Sep 1	1.21	1.16	8.81	9.11	7.37	7.92	44.45	43.76	3.91	3.99
Oct 1	0.88	0.90	9.17	8.99	10.61	10.06	49.58	48.01	4.55	4.32
Nov 1	0.67	0.72	9.50	9.53	14.34	13.43	50.90	50.19	4.83	4.78
Midseason N-V (53-53)										
Sep 1	1.27	1.32	8.56	8.75	6.85	6.78	45.50	44.87	3.90	3.93
Oct 1	0.97	1.02	8.98	8.80	9.39	8.76	49.94	48.72	4.49	4.29
Nov 1	0.79	0.80	9.31	9.20	12.02	11.67	51.83	50.36	4.83	4.63
Valencia (150-150)										
Sep 1	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Oct 1	1.79	2.00	8.75	8.66	4.95	4.37	48.55	46.41	4.25	4.02
Nov 1	1.48	1.57	8.84	9.07	6.06	5.88	50.65	48.98	4.48	4.44
GRAPEFRUIT										
Red Seedless (49-50)										
Sep 1	1.46	1.42	9.88	9.70	6.80	6.86	38.76	38.88	3.83	3.77
Oct 1	1.25	1.35	9.79	9.92	7.86	7.37	44.63	44.92	4.37	4.46
Nov 1	1.08	1.19	9.51	9.67	8.88	8.14	51.06	48.67	4.85	4.71
White Seedless (48-50)										
Sep 1	1.45	1.55	9.98	9.98	6.90	6.44	39.22	39.04	3.91	3.89
Oct 1	1.31	1.36	9.99	9.97	7.65	7.34	44.04	46.36	4.40	4.62
Nov 1	1.17	1.30	9.72	10.20	8.36	7.86	48.01	48.87	4.66	4.98

NA Not available.

Unadjusted Maturity Test Averages, by Areas – Florida: November 2020-2021 and 2021-2022

Fruit type (number of groves) test date	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	2020-2021	2021-2022	2020-2021	2021-2022	2020-2021	2021-2022	2020-2021	2021-2022	2020-2021	2021-2022
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
ORANGES										
Early N-V										
Indian River (9-9)	0.71	0.75	9.83	9.87	13.93	13.29	48.18	48.02	4.74	4.74
Other Areas[1] (107-110)	0.66	0.71	9.47	9.50	14.38	13.45	51.13	50.37	4.84	4.78
Midseason N-V										
Indian River (2-2)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other Areas[1] (51-51)	0.78	0.80	9.30	9.18	12.02	11.69	51.78	50.49	4.82	4.64
Valencia										
Indian River (29-29)	1.57	1.82	9.03	9.60	5.84	5.32	51.81	49.71	4.68	4.77
Other Areas[1] (121-121)	1.46	1.50	8.80	8.94	6.11	6.02	50.37	48.81	4.43	4.37
GRAPEFRUIT										
Red Seedless										
Indian River (41-43)	1.07	1.20	9.51	9.79	8.91	8.20	50.80	48.42	4.83	4.74
Other Areas[1] (8-7)	1.09	1.15	9.48	8.93	8.70	7.78	52.39	50.24	4.94	4.48
White Seedless										
Indian River (41-46)	1.17	1.30	9.77	10.24	8.41	7.89	48.31	49.12	4.72	5.02
Other Areas[1] (7-4)	1.17	(D)	9.39	(D)	8.07	(D)	46.25	(D)	4.33	(D)

D Withheld to avoid disclosing data for individual operations.
[1] Includes Central, Northern, Southern, and Western areas.

Size Frequency Measurement Distributions, by Type – Florida: October

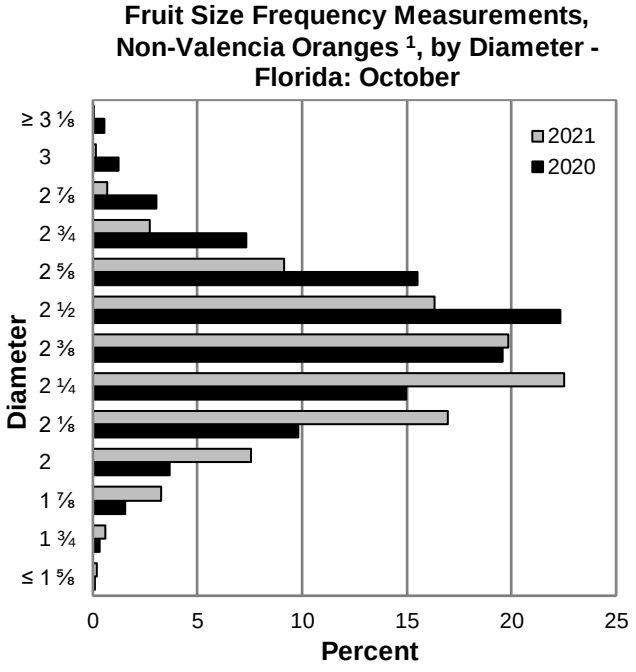
[Size frequency distributions from the October size survey are shown in the following table. The distributions are by percent of fruit falling within the size range of each 4/5-bushel container. These frequency distributions include fruit from regular bloom and exclude fruit from summer bloom]

Type and number of fruit per 4/5–bushel containers	2019	2020	2021
	(percent)	(percent)	(percent)
NON-VALENCIA ORANGES [1]			
64 or less	0.1	0.3	0.0
80	0.8	2.6	0.4
100	8.8	14.9	6.0
125	25.3	32.2	22.7
163 or more	65.0	50.0	70.9
NAVEL ORANGES			
64 or less	43.5	55.5	34.1
80	29.1	24.9	32.5
100	19.2	13.7	23.7
125	6.6	3.8	7.6
163 or more	1.6	2.1	2.1
VALENCIA ORANGES			
64 or less	0.1	0.4	0.1
80	1.4	3.0	1.2
100	11.9	15.3	9.2
125	30.5	30.0	24.9
163 or more	56.1	51.3	64.6

Type and number of fruit per 4/5–bushel containers	2019	2020	2021
	(percent)	(percent)	(percent)
RED GRAPEFRUIT			
32 or less	1.1	3.0	0.4
36	4.1	6.0	3.1
40	7.6	12.1	7.5
48	13.3	16.0	14.5
56	14.4	15.5	17.0
63 or more	59.5	47.4	57.5
WHITE GRAPEFRUIT [2]			
32 or less	1.3	0.2	0.9
36	8.8	2.7	6.5
40	11.3	10.9	14.1
48	15.9	17.8	20.7
56	19.1	21.4	19.8
63 or more	43.6	47.0	38.0

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

The charts below show the distribution of fruit sizes in 2020 compared to 2021. The diameter measurements shown are the minimum values of each eighth inch range, except for the smallest values.



[1] Excludes Navels.