



CITRUS MARCH FORECAST MATURITY TEST RESULTS AND FRUIT SIZE

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March 11, 2025

Florida All Orange Production Up 1 Percent from February Forecast
Florida Non-Valencia Orange Production Up 2 Percent
Florida Valencia Orange Production Unchanged
Florida All Grapefruit Production Up 9 Percent
Florida Lemon Production Unchanged
Florida All Tangerine and Tangelo Production Unchanged

FORECAST DATES - 2024-2025 SEASON	
April 10, 2025	June 12, 2025
May 12, 2025	July 11, 2025

Citrus Production by Type – States and United States

Crop and State	Production ¹		2024-2025 Forecasted Production ¹	
	2022-2023 (1,000 boxes)	2023-2024 (1,000 boxes)	February (1,000 boxes)	March (1,000 boxes)
Non-Valencia Oranges ²				
Florida	6,150	6,760	4,500	4,600
California ³	36,000	38,200	39,000	39,000
Texas ³	570	690	600	600
United States.....	42,720	45,650	44,100	44,200
Valencia Oranges				
Florida	9,670	11,200	7,000	7,000
California.....	8,600	9,300	8,400	7,500
Texas ³	560	490	300	300
United States.....	18,830	20,990	15,700	14,800
All Oranges				
Florida	15,820	17,960	11,500	11,600
California.....	44,600	47,500	47,400	46,500
Texas ³	1,130	1,180	900	900
United States.....	61,550	66,640	59,800	59,000
Grapefruit				
Florida-All	1,810	1,790	1,100	1,200
Red	1,560	1,550	1,000	1,070
White	250	240	100	130
California ³	4,500	4,300	3,700	3,700
Texas ³	2,250	2,400	2,500	2,500
United States.....	8,560	8,490	7,300	7,400
Lemons ³				
Florida ⁴	(NA)	(NA)	600	600
Arizona.....	1,400	950	900	900
California.....	25,800	24,600	26,000	26,000
United States.....	27,200	25,550	27,500	27,500
Tangerines and Mandarins ⁵				
Florida	480	450	350	350
California ³	23,500	27,400	25,000	25,000
United States.....	23,980	27,850	25,350	25,350

¹ Net pounds per box: oranges in California-80, Florida-90, Texas-85; grapefruit in California and Texas-80, Florida-85; lemons-80; 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.

³ Estimates for current month carried forward from previous forecast.

⁴ Estimates began with the 2024-2025 crop year.

⁵ Includes tangelos and tangors.

All Oranges 11.6 Million Boxes

The 2024-2025 Florida all orange forecast released today by the USDA Agricultural Statistics Board is 11.6 million boxes, up 100,000 boxes from the February forecast. If realized, this will be 35 percent less than last season's final production. The forecast consists of 4.60 million boxes of non-Valencia oranges (early, mid-season, and Navel varieties) and 7.00 million boxes of Valencia oranges. An 8-year regression was used for comparison purposes. All references to "average", "minimum", and "maximum" refer to the previous 10 seasons, excluding the 2017-2018 season, which was affected by Hurricane Irma, and the 2022-2023 season, which was affected by Hurricanes Ian and Nicole. Average fruit per tree includes both regular bloom and the first late bloom.

Non-Valencia Oranges 4.60 Million Boxes

The forecast of non-Valencia production is up 100,000 boxes and is now 4.60 million boxes. The Row Count survey conducted February 26-27, 2025, showed nearly all of the early and mid-season non-Valencia rows, excluding Navels, are harvested. The Navel forecast, included in the non-Valencia portion of the forecast is 100,000 boxes.

Valencia Oranges 7.00 Million Boxes

The forecast of Valencia production is unchanged from the February forecast at 7.00 million boxes. Current fruit size is below average and is projected to be below average at harvest, requiring 256 pieces to fill a 90-pound box. Current droppage is above the maximum and projected to be above the maximum at harvest. Harvest of Valencia oranges is still in the early stages.

All Grapefruit 1.20 Million Boxes

The forecast of all grapefruit production is increased from February to 1.20 million boxes. The red grapefruit forecast is updated to 1.07 million boxes. The white grapefruit forecast is now 130,000 boxes. The Row Count survey conducted February 26-27, 2025, indicated 93 percent of grapefruit rows are harvested.

Lemons 600,000 Boxes

The forecast of lemons is 600,000 boxes, carried over from the February forecast.

Tangerines and Mandarins 350,000 Boxes

The forecast for tangerines and tangelos is unchanged from the February at 350,000 boxes, 22 percent less than last season's utilization of 450,000 boxes. This forecast number includes all certified tangerine and tangelo varieties.

Reliability

To assist users in evaluating the reliability of the March 1 Florida production forecasts, the "Root Mean Square Error," a statistical measure based on past performance, is computed. The deviation between the March 1 production forecast and the final estimate is expressed as a percentage of the final estimate. The average of squared percentage deviations for the latest 20-year period is computed. The square root of the average becomes statistically the "Root Mean Square Error." Probability statements can be made concerning expected differences in the current forecast relative to the final end-of-season estimate, assuming that factors affecting this year's forecast are not different from those influencing recent years.

The "Root Mean Square Error" for the March 1 Florida all orange production forecast is 5.3 percent. If you exclude the four abnormal production seasons (four hurricane seasons), the "Root Mean Square Error" is 5.8 percent. This means chances are 2 out of 3 that the current all orange production forecast will not be above or below the final estimates by more than 5.3 percent, including abnormal seasons, or 5.8 excluding abnormal seasons. Chances are 9 out of 10 (90 percent confidence level) that the difference will not exceed 9.1 percent including abnormal seasons or 10.1 percent excluding abnormal seasons.

Changes between the March 1 Florida all orange forecast and the final estimates during the past 20 years have averaged 3.52 million boxes (3.79 million, excluding abnormal seasons), ranging from 0.00 million boxes to 10.7 million boxes including or excluding abnormal seasons. The March 1 forecast for all oranges has been below the final estimate 6 times, equal 1 time, and above 13 times, (below 5 times, equal 1 time, and above 10 times, excluding abnormal seasons). The difference does not imply that the March 1 forecasts this year are likely to understate or overstate final production.

Forecast Components, by Type – Florida: March 2025

[Survey data is considered final in December for Navels, January for early and mid-season (non-Valencia) 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 & mid-season (Non-Valencia) ¹	9,725	392	56	327
Navel.....	480	123	65	146
Valencia.....	20,124	244	60	256
GRAPEFRUIT				
Red.....	1,357	271	43	123
White.....	161	369	51	100

¹ Excludes Navels.

Maturity

Regular bloom fruit samples were collected from groves on established routes February 26-27, 2025 in Florida’s five major citrus producing areas and tested February 28, 2025. All comparisons are made to the previous season.

Unadjusted Maturity Tests — Florida: March 1, 2023-2024 and 2024-2025

[Averages of regular bloom fruit from sample groves. Samples were run through an FMC 091B machine using pneumatic pressure. This machine utilizes a 0.025 short strainer with 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	
	2023-2024 (percent)	2024-2025 (percent)	2023-2024 (percent)	2024-2025 (percent)	2023-2024	2024-2025	2023-2024 (pounds)	2024-2025 (pounds)	2023-2024 (pounds)	2024-2025 (pounds)
Valencia Oranges (132-132)										
Oct 1.....	1.78	1.80	9.17	8.64	5.27	4.85	45.80	47.02	4.21	4.07
Nov 1.....	1.47	1.46	9.22	8.70	6.40	6.00	49.23	50.69	4.54	4.41
Dec 1.....	1.23	1.17	9.56	8.99	7.91	7.80	51.49	54.55	4.92	4.90
Jan 1.....	1.09	1.01	9.75	9.08	9.07	9.10	53.48	53.81	5.21	4.89
Feb 1.....	0.96	0.92	10.06	9.25	10.61	10.18	54.76	55.65	5.51	5.14
Mar 1.....	0.88	0.86	10.03	9.80	11.54	11.60	54.64	55.22	5.48	5.41

Size Frequency Measurement Distributions, by Type — Florida: February Survey

[Size frequency distributions from the February 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.]

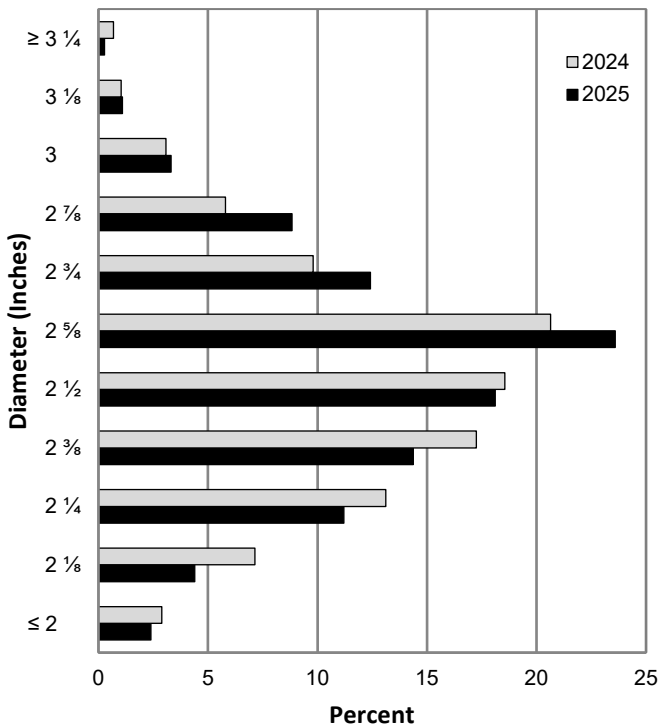
Type and number of fruit per 4/5 – bushel containers	2023	2024	2025	Type and number of fruit per 4/5 – bushel containers	2023	2024	2025
	(percent)	(percent)	(percent)		(percent)	(percent)	(percent)
VALENCIA ORANGES				WHITE GRAPEFRUIT ¹			
64 or less	0.3	1.0	0.7	32 or less	2.7	1.2	(N/A)
80	3.3	6.3	7.5	36	8.2	9.2	(N/A)
100	17.6	21.3	26.6	40	18.0	16.9	(N/A)
125	36.4	31.0	32.8	48	22.0	16.2	(N/A)
163 or more	42.4	40.4	32.4	56	20.2	13.8	(N/A)
RED GRAPEFRUIT ¹				63 or more	28.9	42.7	(N/A)
32 or less	0.0	6.3	0.0				
36	1.1	5.6	3.0				
40	2.4	10.3	13.5				
48	5.0	12.5	29.5				
56	8.4	13.4	24.5				
63 or more	83.1	51.9	29.5				

¹ Excludes seedy.

² Not available.

The charts below show the distribution of fruit sizes in 2024 compared to 2025. The diameter measurements shown are the minimum values of each eighth inch range, except for the smallest value.

Fruit Size Frequency Measurements, Valencia Oranges, by Diameter - Florida: February Survey



Fruit Size Frequency Measurements, Red Seedless Grapefruit, by Diameter - Florida: February Survey

