

2024-25 California Valencia Orange Objective Measurement Report



California Department of Food and Agriculture

Cooperating with the USDA, National Agricultural Statistics Service, Pacific Regional Office - California

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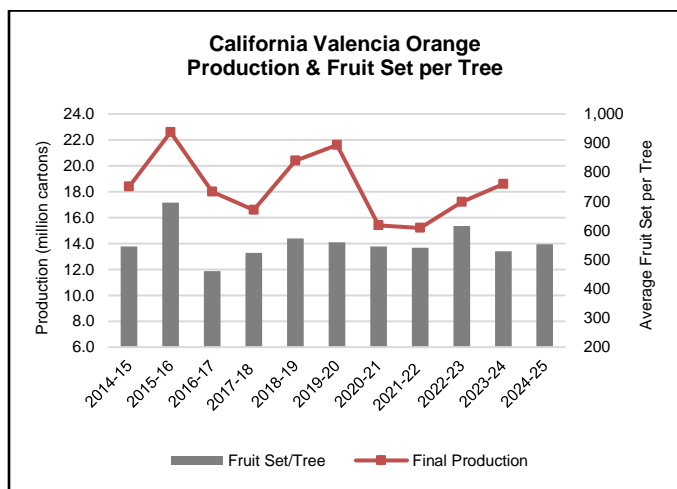
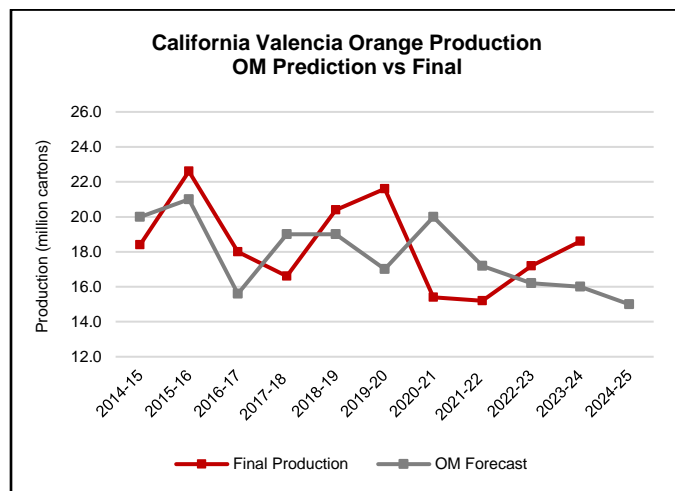
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VALENCIA ORANGE PRODUCTION FORECAST AT 15.0 MILLION CARTONS

The March forecast for the 2024-25 Valencia orange crop is 15.0 million cartons. This forecast was based on the results of the 2024-25 Valencia Orange Objective Measurement (O.M.) Survey, which was conducted from January 13 to February 8, 2025. Estimated fruit set per tree, fruit diameter, trees per acre, bearing acreage, and oranges per carton were used in the statistical models estimating production.

Survey data indicated an average fruit set per tree of 552, a 4.3% increase from the previous year and 1.1% below the five-year average of 558. The average March 1 diameter was 2.392 inches, down 1.7% from the previous year and down 2.8% from the five-year average of 2.461.

Funding for the survey was provided by the California Citrus industry.



SURVEY HISTORY

A Valencia Orange Objective Measurement Survey was conducted from the 1985-86 to 1993-94 seasons before suspension due to a lack of funding. The survey has been conducted since it was reinstated for the 1999-00 season, with the exception of the 2006-07 season due to a substantial freeze. The data from the first three years after the survey was reinstated were used for research purposes in developing crop-estimating models.

SURVEY SAMPLE

A sample of 330 Valencia orange groves were randomly selected proportional to acreage, county, year planted, and variety representation in the state, with 301 of these groves being utilized in this survey. The sampled groves were primarily in the top Valencia orange producing counties of Tulare, Kern, San Diego, and Ventura.

Once a grove was randomly chosen and grower permission was granted, two trees were randomly selected from each grove. For each randomly selected tree, its trunk was measured along with all connected branches. A random number table was then used to select a branch and then all connected branches from the selected branch were measured. This process was repeated until a branch was reached with no significant limbs beyond it.

The final randomly selected branch, called the terminal branch, was then closely inspected to count all fruit connected to it and all fruit along the path from the trunk to the terminal branch. Since each randomly selected branch has a probability of selection associated with it, a probability-based method was used to estimate a fruit count for the entire tree.

In the last week of the survey period, every third sampled grove was visited to collect fruit diameter measurements. For each sampled tree (two trees per grove), fruit diameters were measured from the right quadrant of four surrounding trees. These measurements were used to estimate an average fruit diameter for the grove.

CALIFORNIA VALENCIA ORANGE STATEWIDE DATA

Crop year	Number of sampled groves	Final utilized production (Cartons) ¹	Forecast utilized production (Cartons) ¹	Bearing acres	Average trees per acre	Average set per tree	Average fruit diameter (Inches)
2009-10	571	30,000,000	34,000,000	43,000	124	704	2.630
2010-11	534	29,000,000	26,000,000	41,000	124	631	2.546
2011-12	533	25,000,000	28,000,000	40,000	124	611	2.583
2012-13	526	24,000,000	25,000,000	39,000	125	632	2.484
2013-14	500	21,600,000	24,000,000	36,000	124	616	2.570
2014-15	539	18,400,000	20,000,000	34,000	123	545	2.571
2015-16	531	22,600,000	21,000,000	32,000	123	696	2.502
2016-17	498	18,000,000	15,600,000	30,000	124	461	2.552
2017-18	524	16,600,000	19,000,000	29,000	124	524	2.585
2018-19	349	20,400,000	19,000,000	28,000	124	573	2.534
2019-20	346	21,600,000	17,000,000	27,000	124	560	2.471
2020-21	334	15,400,000	20,000,000	26,000	124	545	2.552
2021-22	349	15,200,000	17,200,000	26,000	124	541	2.459
2022-23	340	17,200,000	16,200,000	25,500	124	616	2.391
2023-24 ²	348	18,600,000	16,000,000	25,500	124	529	2.433
2024-25	301	---	15,000,000	25,000	124	552	2.392

¹ Cartons have a standard equivalent weight of 40 lbs.

² Final production is subject to revision in the Crop Production report released on April 10, 2025.

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