2024 California Mandarin Objective Measurement Report

CALIFORNIA TANGO AND W. MURCOTT AFOURER MANDARIN FORECAST

RESULTS

The 2024-25 California forecast for only the Tango and W. Murcott Afourer Mandarin varieties is 29.0 million 40-lb. cartons. This forecast is based on the results of the 2024-25 Mandarin Objective Measurement (O.M.) Survey, which was conducted from July 1 to September 1, 2024. Estimated fruit set per tree, fruit diameter, trees per acre, bearing acreage, and mandarins per box were used in the statistical models estimating production.

Survey data indicated a fruit set per tree of 666, up 12% from the previous year. The average September 1 diameter was 1.343 inches, up 8% from last year for these varieties. Bearing acreage is estimated at 33,000, which results in a yield of 879 40-lb. cartons per acre.

SURVEY HISTORY

This is the second year the USDA, National Agricultural Statistics Service, Pacific Regional Office has published a production forecast of Tango and W. Murcott Afourer Mandarin varieties. Fruit counts and size measurements have been collected each year since 2020 as three years of data are needed for the statistical models.

SURVEY SAMPLE

A sample of 323 Tango and W. Murcott Afourer Mandarin groves were randomly selected proportional to county and variety bearing acreage, with 310 of these groves utilized in this survey. 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 randomly selected branch were measured.

This process was repeated until a branch was reached with no significant limbs beyond it. This randomly selected branch, called the terminal branch, was then closely inspected to count all fruit connected to it, as well as all fruit along the path from the trunk to the terminal branch. Since each selected path has a probability of selection associated with it, a probability-based method was then applied to estimate a fruit count for the entire tree.

In the last week of the survey period, fruit diameter measurements were collected on the right quadrant of four trees surrounding the two sampled trees. These measurements were used to estimate an average fruit diameter per tree.

California Mandarin Objective Measurement Survey Results, September 1, 2024

County	Number of samples	Average set per tree	Average diameter (inches)
Fresno	45	728	1.321
Kern	76	499	1.366
Madera	30	838	1.233
Tulare	153	707	1.345
Other[1]	6	429	1.679
State Survey Avg.	310	666	1.343

[1]Other includes Imperial and Riverside counties.

State Average Set and Diameter by Year

Year	Number of samples	Average set per tree	Average diameter (inches)
2020	271	863	1.490
2021	287	263	1.363
2022	293	551	1.344
2023	280	593	1.244
2024	310	666	1.343

For more California agricultural statistics: **www.nass.usda.gov/ca**

The California Citrus Industry has been very supportive.
We appreciate your continued cooperation!