



United States Department of Agriculture
National Agricultural Statistics Service



2024 Almond Objective Measurement Survey Results

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Survey Methodology

- Random selection of orchards based on location, variety and age
- Randomly select two trees in each selected orchard
- Random Path Method used to locate two count units
- Sample of nuts taken and sent to sizing station
- Measure kernel weight, length, width, thickness and grade

Forecast Models

- Models are designed to produce a forecast of all almond production at the state level from the sample data.
- Models do not forecast production by variety. Separate models are run for Nonpareil since there are a significant number of samples.

Forecast Models

- Models use:
 - official estimates of bearing acres and trees per acre
 - OM measurements of:
 - nuts per tree
 - percent sound
 - weight
 - width
 - thickness
 - length
- Model output is regressed against final production using previous 15 years.



2024 Almond OM Forecast



Data Collection

- Field Work: May 25 – June 28
- Use 50+ Enumerators
- Increased sample size to 1,064 orchards
 - Collected data from 1,904 trees from 952 orchards

Thank you to the growers for allowing us access to your orchards.

Thank you to those that encouraged growers to participate.



2024 Almond OM Forecast



Number of Samples by Variety within Counties

	Butte	Carmel	Independence	Monterey	Nonpareil	Padre	Other ¹	Total
Butte	0	0	1	1	10	0	0	12
Colusa	4	1	0	6	24	1	7	43
Fresno	10	0	30	43	61	10	33	187
Glenn	1	0	0	0	20	0	0	21
Kern	15	1	9	48	64	8	31	176
Kings	0	0	3	5	4	0	0	12
Madera	5	1	9	33	42	8	18	116
Merced	11	11	18	26	40	11	21	138
San Joaquin	2	2	9	0	22	1	3	39
Solano	0	0	2	0	1	0	0	3
Stanislaus	7	17	22	20	46	7	30	149
Sutter	0	0	1	0	0	0	0	1
Tehama	0	0	0	0	2	0	0	2
Tulare	1	0	6	15	18	0	1	41
Yolo	0	0	1	2	7	0	2	12
Total	56	33	111	199	361	46	146	952

¹ Other includes Aldrich, Bennett, Fritz, Mission, Price Cluster, Shasta, Sonora, Supareil, Winters, and Wood Colony.

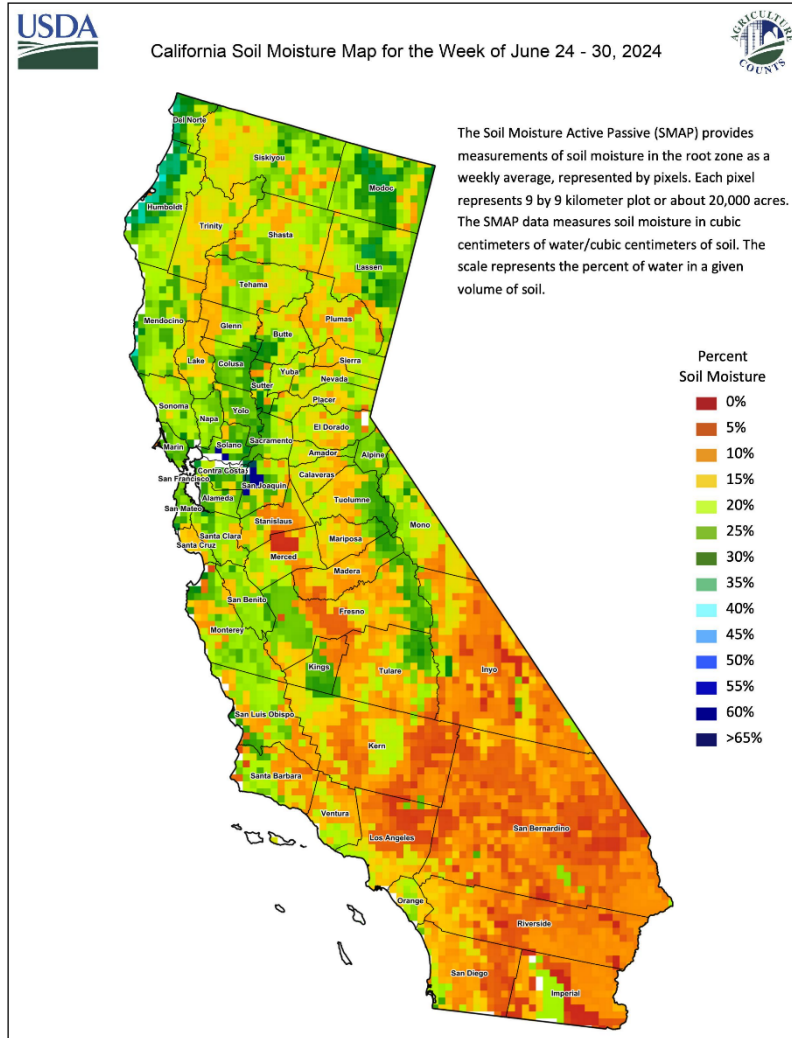


Crop Conditions



- Mostly favorable weather during the bloom period, which began the second week in February and finished by the middle of March.
- Bee hours reported to be significantly higher than last year.
- Wet and warm weather in April increased pest and disease pressure, but dry conditions and mild temperatures in May helped the developing crop.
- Multiple heat waves across the state during June and July required growers to increase irrigation.
- The almond harvest is expected to be on schedule.

Topsoil Moisture Map





2024 Almond OM Forecast



And the 2024 Production
forecast is.....

- **Highlights:**
 - **Production forecasted at 2.80 billion meat pounds**
 - **Down 7% from the May 2024 Subjective forecast of 3.00 billion meat pounds**
 - **Up 13% from the 2023 production of 2.47 billion meat pound**
 - **The 80% confidence interval is 2,430 to 3,170 million meat pounds.**



2024 Almond OM Forecast



- **Highlights:**
 - **1.38 million bearing acres, unchanged from 2023**
 - **Yield calculates to 2,030 pounds/acre, up 13% from last year's 1,790 pounds/acre**



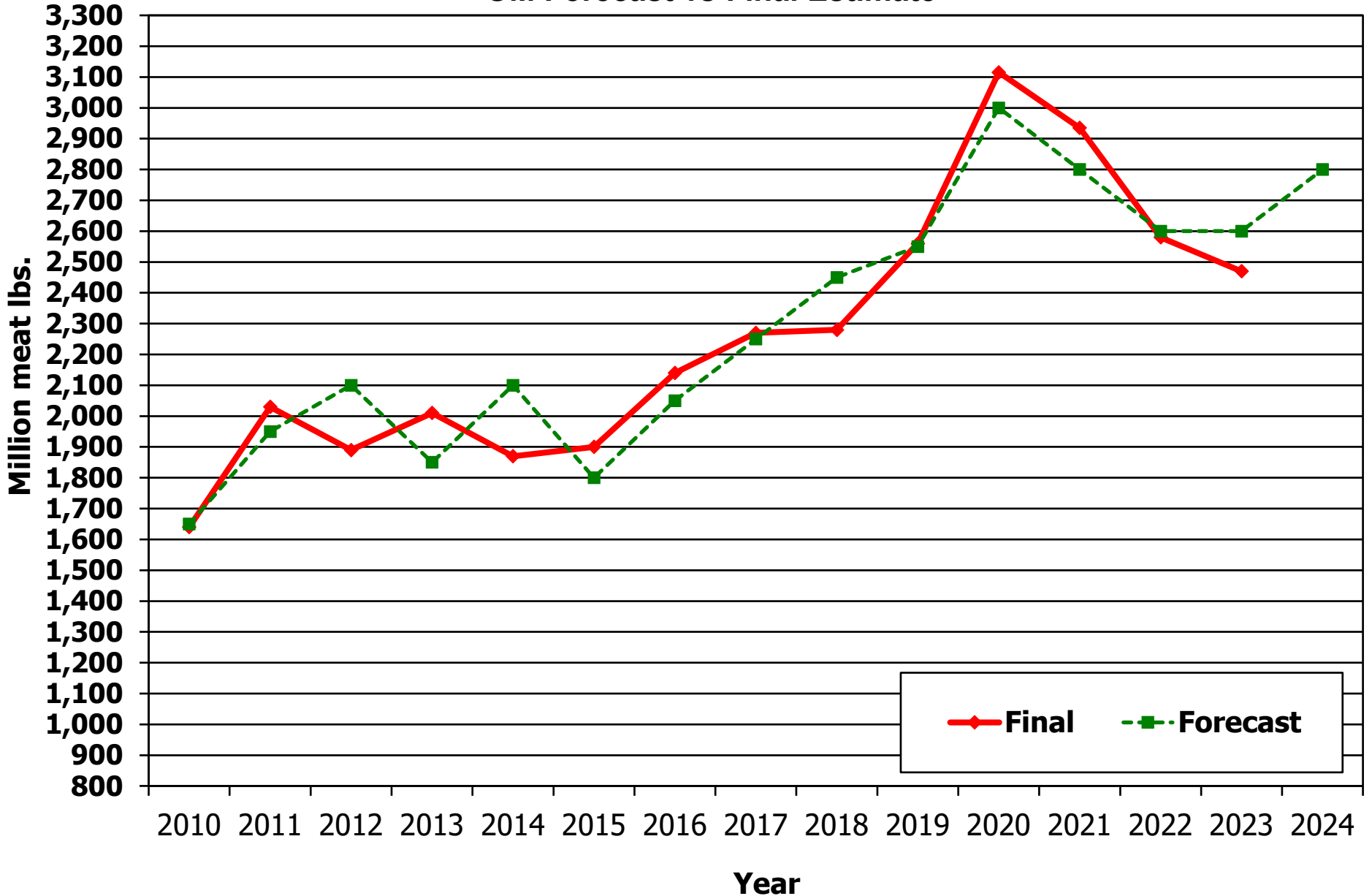
2024 Almond OM Forecast



- **Highlights – Nonpareil Variety:**
 - **Production from Nonpareil variety is forecasted at 1.10 billion meat pounds**
 - **Up 17% from the 2023 production**
 - **39% of total production**

ALMOND PRODUCTION - CALIFORNIA

OM Forecast vs Final Estimate





2024 Almond Objective Measurement Survey Results



Almond Set 2022 – 2024 Average nuts per tree

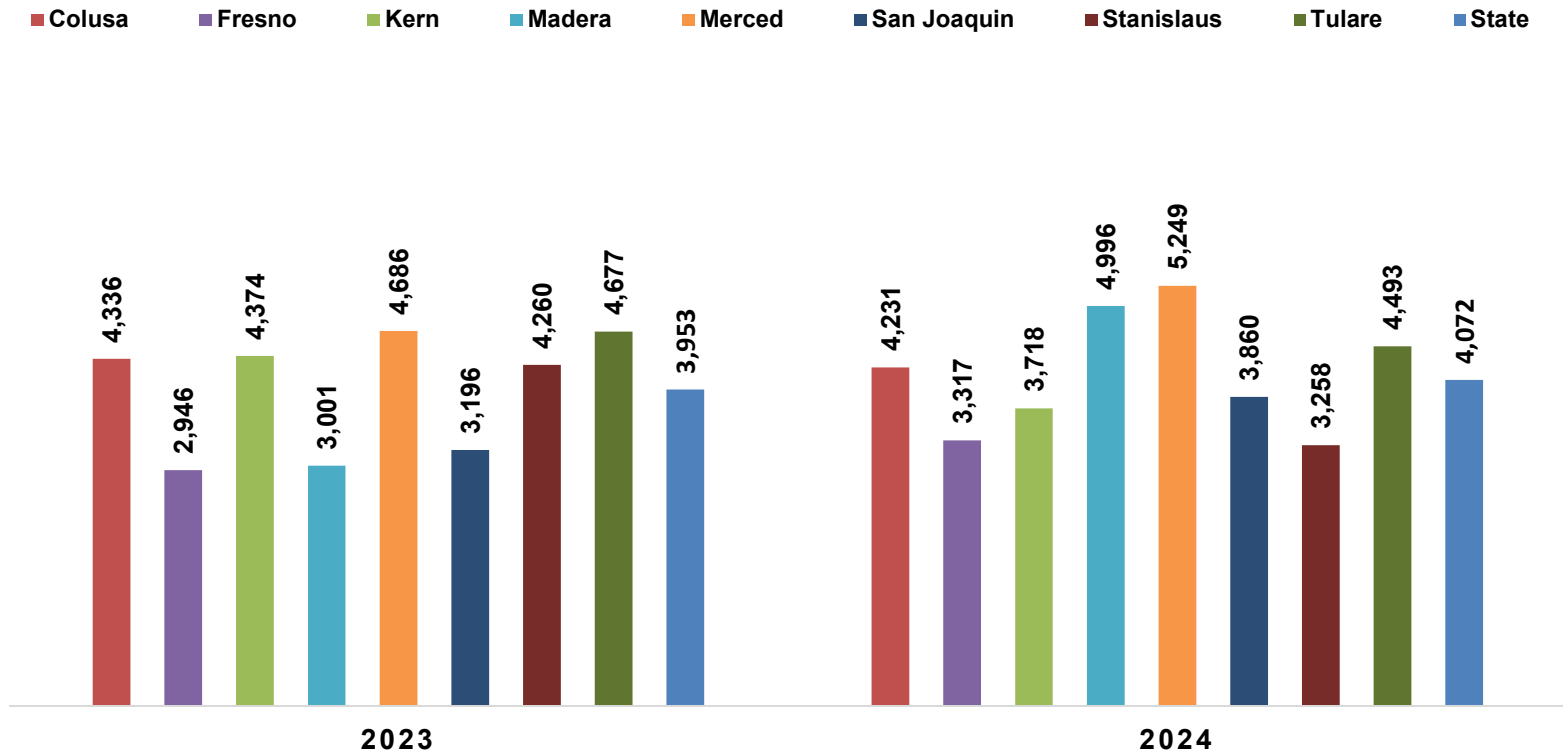
	2022	2023	2024	% Change
California	4,082	3,953	4,072	3.0



2024 Almond Objective Measurement Survey Results



ALMONDS
NUTS PER TREE, BY COUNTY & STATE





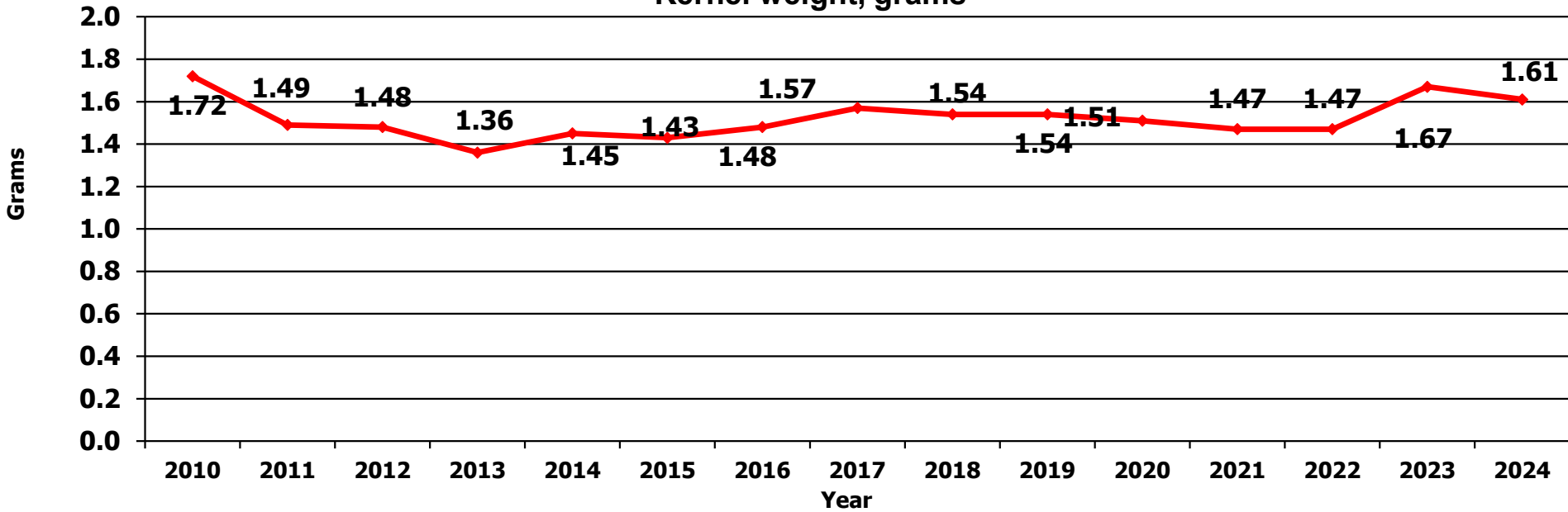
2024 Almond Objective Measurement Survey Results

Almond Set per Tree by Variety, 2022 - 2024

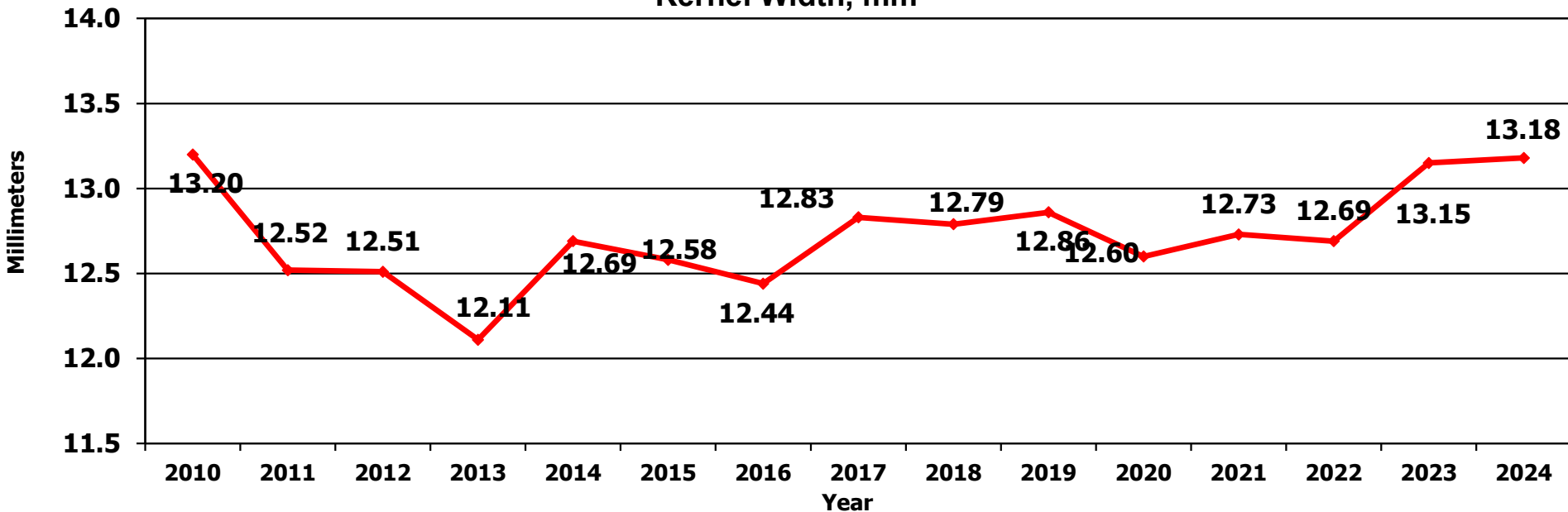
	2022	2023	2024	% Change
Butte	4,173	4,043	3,316	-18.0
Carmel	4,417	4,959	5,356	8.0
Independence	4,624	4,048	3,448	-14.8
Monterey	3,908	3,598	4,256	18.3
Nonpareil	3,966	4,004	4,137	3.3
Padre	4,928	4,055	3,953	-2.5

ALMONDS

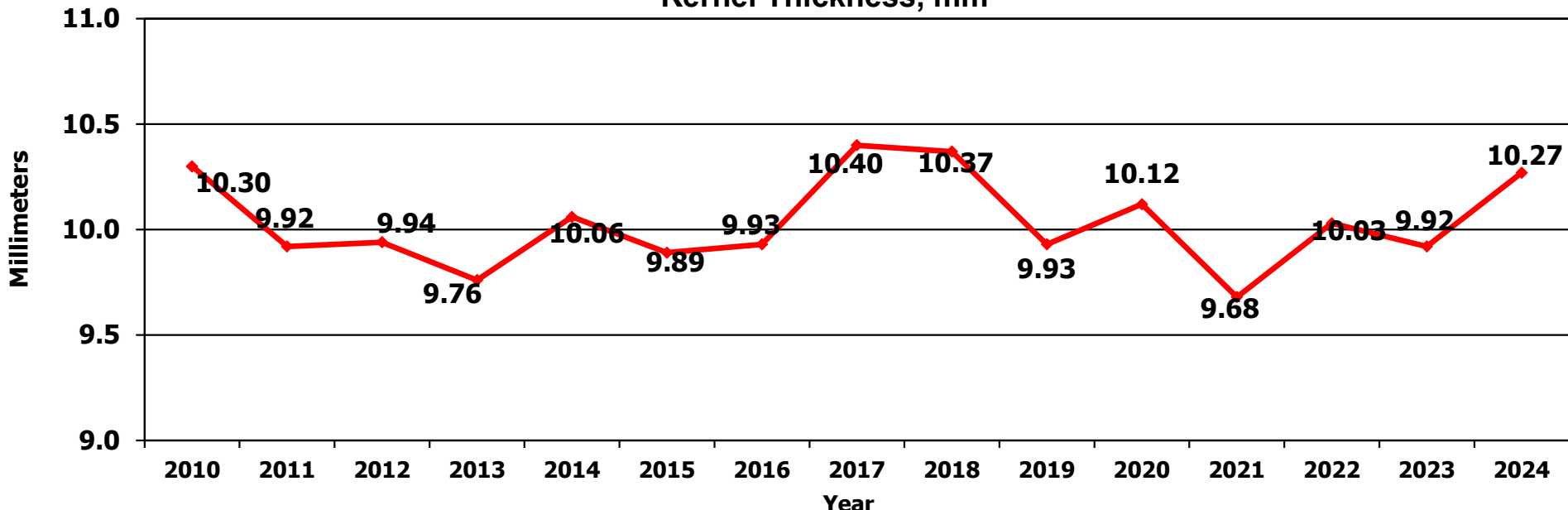
Kernel weight, grams



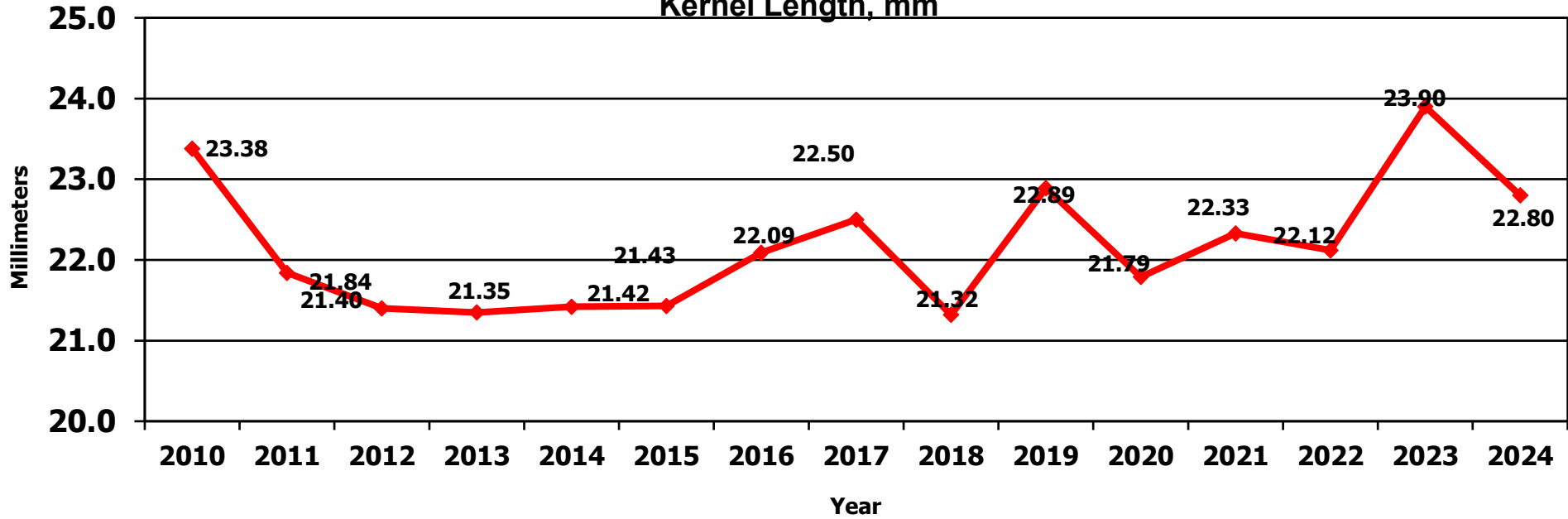
ALMONDS
Kernel Width, mm



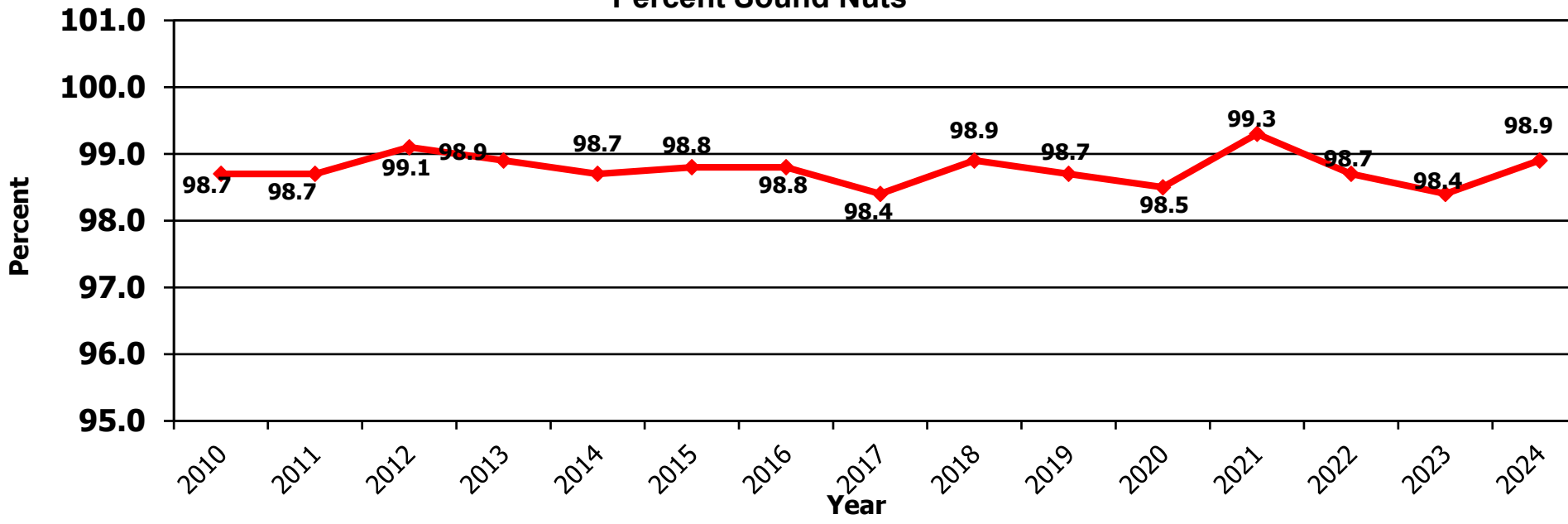
ALMONDS
Kernel Thickness, mm



ALMONDS Kernel Length, mm



ALMONDS Percent Sound Nuts





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Forecast and all Statistics Available On-line

- PRO Web: www.nass.usda.gov/ca
- NASS Web: www.nass.usda.gov
- PRO Contact: (916) 738-6600

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**Thank you to the producers who allowed us to conduct this
survey in their orchards.**



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