# Almond Board of California Disease Forecasts 2024 in cooperation with the University of California and Semios

No.	County	Region	Anthracnose (date, value, level)^	Green fruit rot (date, precipitation, level)^	Bacterial blast (date, value, level)^	Bacterial spot (date, value, level)^	Alternaria leaf spot (date, value, level)^
1	Butte	West	0	0	0	0	0
2	Colusa	East	0	0	0	0	0
3	Fresno	East	0	0	0	0	0
4	Fresno	Central	0	0	0	Low (<0.4)	0
5	Fresno	West	0	0	0	0	0
6	Kern	Central	0	0	0	0	0
7	Kern	West	0	0	0	Low (<0.16)	0
8	Kern	East	0	0	0	0	0
9	Madera	Central	0	0	0	Low (<0.1)	0
10	Merced	Central	0	0	0	0	0
11	Stanislaus	East	0	0	0	0	0
12	Stanislaus	Central	0	0	0	0	0
13	Stanislaus	West	0	0	0	0	0

Table 1. Daily risk assessment disease forecasts for Tues., Feb. 27 through Mon., Mar. 4, 2024\*

\* - 7-day forecasts are based on temperature (inside- and outside-canopy measurements), precipitation, and leaf wetness which are powered by the Semios<sup>®</sup> precision farming platform.

^ - Numerical risk is scaled as follows: 0 = no risk, 1 = action threshold (Note: values may exceed 1 due to hourly accumulations).

#### Industry Advisory - Summary for Selected Almond Growing Regions

Precipitation occurred in all regions last week from 2-19 to 2-25-24, with a total amount of >22 mm (>0.86 in) in Butte-West, Fresno-East, Madera-Central, and Stanislaus-Central, -East. High and average temperatures near 15°/20°C (59°-68°F) occurred Fresno-Central, -East, and -West, Kern-Central, -East, and -West, Madera-Central, Merced-Central, and Stanislaus-East, -West. These regions therefore had a high risk for brown rot blossom blight with pink bud to full bloom stages of almond. Additionally, due to warm temperatures (>20°C; 68°F) in Fresno-Central, Kern-West, and Madera-Central last week, the bacterial spot risk was high. This means that mummified fruit most likely oozed bacteria from last year's infections that could be rain-dispersed onto flowers, and a treatment of copper-mancozeb should be applied to the Fritz cultivar.

With additional high precipitation (ca. 24.5 mm; 1 in) and warm temperatures (>15°C) forecasted in the coming week, especially in Fresno-Central, -East, -West, Kern-Central, -East, Madera-Central, Merced-Central, and Stanislaus-Central, -East, and -West, the risk for brown rot blossom blight is high in most areas with trees in full bloom to petal fall. Applications at full bloom with locally systemic or translaminar fungicides will have reach back activity and will be highly effective. Other counties have high temperatures of less than 15°C predicted. Wetness allows *Botrytis cinerea* and other fungi to grow on senescing flower parts. Therefore, areas that had high rainfall should be scouted for Botrytis blossom blight, especially in cultivars with high flower density. With continued high rainfall, green fruit rot could be a problem in the coming weeks. Temperatures are forecasted to be below threshold levels for bacterial spot and anthracnose (below 62°F; 17°C) and above threshold levels (-1°C) for bacterial blast and therefore, the risk is low for these diseases. In the absence of leaves and presence of low temperatures, Alternaria leaf spot is at low risk for all regions.

The website https://www.ag-radar.com (password: Almondboard2022) displays actual and forecasted disease risk assessments for each region. Because these are regional forecasts, actual and predicted precipitation may vary among locations within each region. Additionally, historical records and experience for specific locations should be considered. This advisory will be updated weekly. The website "2022 Fungicide Efficacy Tables" is available to optimize fungicide selection and applications (<u>http://ipm.ucanr.edu/PDF/PMG/fungicideefficacytiming.pdf</u>).

No.	County	Region	Date	Avg Temp (in canopy) °C	Avg Humidity (%)	Total Precip. (mm)	Leaf Wetness (hours/day)
1	Butte	West	2-26 to 3-4	6.4 - 11.2	50.6 - 79.2	14.4	7.1
2	Colusa	East	2-26 to 3-4	6.8 - 12.9	50.0-81.0	14.1	6.2
3	Fresno	Central	2-26 to 3-4	8.0 - 12.6	72.7 - 78.3	21.1	10.3
4	Fresno	East	2-26 to 3-4	7.5 – 12.2	73.4 – 89.3	47.9	15.6
5	Fresno	West	2-26 to 3-4	7.4 – 12.1	57.6 - 78.1	16.9	8.5
6	Kern	Central	2-26 to 3-4	7.0 - 13.4	67.6 - 80.0	18.3	10.0
7	Kern	East	2-26 to 3-4	8.1 - 14.5	66.3 - 83.5	28.0	8.6
8	Kern	West	2-26 to 3-4	8.0 - 14.4	68.0 – 75.8	7.5	10.1
9	Madera	Central	2-26 to 3-4	7.4 – 12.7	68.2 - 82.2	42.6	12.7
10	Merced	Central	2-26 to 3-4	7.5 – 12.3	69.1 - 81.3	38.4	13.3
11	Stanislaus	Central	2-26 to 3-4	7.0 – 12.6	67.0 - 82.7	28.5	12.8
12	Stanislaus	East	2-26 to 3-4	6.7 – 12.4	74.4 - 86.2	42.4	16.3
13	Stanislaus	West	2-26 to 3-4	7.4 - 11.8	59.8 - 81.3	21.3	9.5

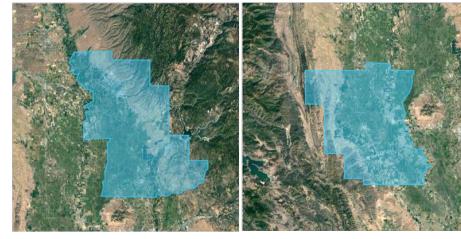
#### Table 2. Forecasted weather for Tues., Feb. 26 through Mon. Mar. 4, 2024\*

Note: In this table, the order of some regions is the same as table 1 and was generated using the RADAR on-line forecasted report powered by the Semios<sup>®</sup> precision farming platform.

Fig. 1. Maps of counties and regions.

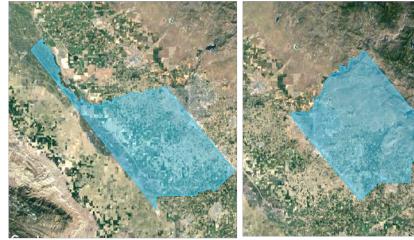
# Colusa East

Butte West



### Fresno Central

Fresno East



# Fresno West



## Fig. 2. Maps of counties and regions.

Kern West



Kern East



Kern Central

Stanislaus Central





Stanislaus East



Stanislaus West

