

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

Table 1. Daily risk assessment disease forecasts for Mon., Mar. 4 through Mon., Mar. 11, 2024*

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	0	0
5	Fresno	West	0	0	0	0	0
6	Kern	Central	0	0	0	0	0
7	Kern	West	0	0	0	0	0
8	Kern	East	Low (3-6: 0.14)	0	0	Low (3/6: 0.34)	0
9	Madera	Central	0	0	0	0	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

* - 7-day forecasts are based on temperature (inside- and outside-canopy measurements), precipitation, and leaf wetness which are powered by the Semios® 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 2-26 to 3-3-24, with a total amount of >12.8 mm (>0.47 in) in Colusa-E, Fresno-C, -E, Madera-C, Merced-C, and Stanislaus-C, -E. Maximum and average temperatures near 15°-20°C (59°-68°F) occurred in all regions that had >12.8 mm of rainfall. Fresno-C, -East, Kern-W, Madera-C, Merced-C, and Stanislaus-C, -E, -W all had >12 h avg leaf wetness hours with max. temperatures above 15°-20°C (59°-68°F). Therefore, these regions had a high risk for brown rot blossom blight with full bloom to petal fall stages of almond. Fungicide applications that were called for in last week’s forecast should protect the blossoms. Additionally, due to warm temperatures (>20°C; 68°F) and extended leaf wetness in all -C, -E, and -W regions of Fresno, Kern, Merced, Madera, and Stanislaus Co. last week, the bacterial spot risk was moderate for the Fritz cultivar. 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 is warranted for the Fritz cultivar if it was not applied yet.

For the coming week, although some precipitation is forecasted in Butte-W (ca. 14.7 mm; 0.57 in), most regions have low precipitation and moderate max. temperatures (>15°C <20°C) forecasted and thus, the risk for brown rot blossom blight is moderate in most areas with trees in full bloom to petal fall especially if a fungicide was already applied. Wetness allows *Botrytis cinerea* and other fungi to grow on senescing flower parts. Therefore, areas that had high rainfall should be scouted for brown rot and gray mold blossom blight, especially in cultivars with high flower density. With continued high leaf wetness (>9 h/day), green fruit rot could be a problem in the coming week especially in Butte-W, Kern-C, -W, Madera-C, Merced-C, and Stanislaus-C, -E, -W. Temperatures are forecasted to be below threshold levels for bacterial spot and anthracnose (<17°C; 62°F) and above threshold levels (-1°C) for bacterial blast and therefore, the risk is low for these diseases (Table 1). Table 2 shows that the range of average temperatures is less than 15°C but most regions have long durations of avg. leaf wetness (>9 h/day) indicating a potential for jacket rot/green fruit rot. 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 (<http://ipm.ucanr.edu/PDF/PMG/fungicideefficacytiming.pdf>).

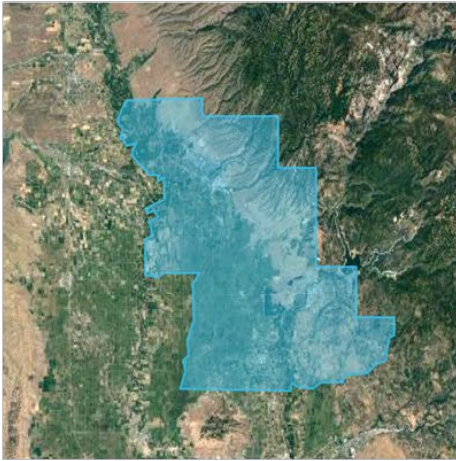
Table 2. Forecasted weather for Mon., Mar. 4 through Mon. Mar. 11, 2024*

No.	County	Region	Date	Avg Temp (in canopy) °C	Avg Humidity (%)	Total Precip. (mm)	Leaf Wetness (hours/day)
1	Butte	West	3-4 to 3-11	7.7 - 11.2	60.9 – 80.4	14.7	9.8
2	Colusa	East	3-4 to 3-11	7.8 – 11.8	58.0 – 79.9	4.1	9.5
3	Fresno	Central	3-4 to 3-11	10.6 – 13.4	68.2 – 78.2	0.04	9.9
4	Fresno	East	3-4 to 3-11	10.8 – 13.2	68.8 – 85.1	0	11.9
5	Fresno	West	3-4 to 3-11	10.2 – 12.8	65.7 – 77.1	2.4	8.4
6	Kern	Central	3-4 to 3-11	9.5 – 12.9	68.0 – 80.6	2.4	10.0
7	Kern	East	3-4 to 3-11	10.8 – 14.6	64.1 – 84.9	8.6	7.0
8	Kern	West	3-4 to 3-11	11.0 – 13.3	65.8 – 78.3	2.5	9.9
9	Madera	Central	3-4 to 3-11	9.5 – 13.0	70.1 – 78.6	0.6	9.8
10	Merced	Central	3-4 to 3-11	10.4 – 13.0	70.9 – 77.7	0.3	9.9
11	Stanislaus	Central	3-4 to 3-11	9.5 – 12.2	72.9 – 77.7	0.6	11.1
12	Stanislaus	East	3-4 to 3-11	9.6 – 12.3	69.7 – 81.5	1.3	12.3
13	Stanislaus	West	3-4 to 3-11	9.5 – 12.3	66.4 – 78.9	0.4	9.3

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® precision farming platform.

Fig. 1. Maps of counties and regions.

Butte West



Colusa East



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

