

**Almond Board of California Disease Forecasts 2023**  
in cooperation with the University of California and Semios

**Table 1.** Daily risk assessment disease forecasts for Thur., June 1 through Thur., June 8, 2023\*

No.	County	Region	Alternaria leaf spot daily value (date, index)^	Anthracnose (date, value, level)^	Bacterial spot (date, value, level)^	Almond scab sporulation level (date, LW value, Precip.)^
1	Butte	West	0, <b>Low</b> (7-day index=2; Season DSV=2)	<b>High</b> (6-5: 7.04; 5-day index=7.04)	1.1, <b>High</b> (6-5: 1.1; 7-day index=1.1)	0, <b>Low</b>
2	Colusa	East	0	0	0	0
3	Fresno	Central	0, <b>Very low</b> (Season DSV=1)	0	0	0
4	Fresno	East	0, <b>Low</b> (Season DSV=4)	0	0	0
5	Fresno	West	0	<b>High</b> (6-7: 4.93; 5-day index=4.93)	<b>High</b> (6-7: 6.41; 7-day index=6.41)	0, <b>Low</b> (6-7: <1 h)
6	Kern	Central	0, <b>Low</b> (Season DSV=2)	0	0	0
7	Kern	East	0, <b>Low</b> (Season DSV=31)	0	0	0
8	Kern	West	0	0	0	0
9	Madera	Central	0, <b>Low</b> (Season DSV=3)	0	0	0
10	Merced	Central	0	0	0	0
11	Stanislaus	Central	0	0	0	0, <b>Low</b> (6-1: 1 h)
12	Stanislaus	East	0	0	0	0, <b>Low</b> (6-1: 4 h)
13	Stanislaus	West	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

Accumulated hours of leaf wetness (LW) in several regions last week resulted in some scab sporulation risk in Butte-W with  $\leq 15$  h LW; Fresno-C, -E with 7-13 h LW; Kern-C, -E with 3-29 h LW; and Stanislaus-W with 25 h LW. Average in-canopy temperatures were moderate (17.5-25.4 C or 63.5-77.7 F) across all regions. In Kern-E last week, the Alternaria leaf spot forecast was high with accumulated LW of 53 h. Based on the last two weeks, the DSV for the 7-day index reached a level of 31 (Table 1). This indicates that an application of a fungicide for Alternaria leaf spot is warranted in Kern-E although the forecast for the coming week is low. Note that fungicides should be applied usually within 1 to 2 weeks once a DSV of 10 is reached, and then the DSV is reset to reaccumulate after three weeks from a fungicide application under low rainfall conditions. In the coming week, low rainfall is forecasted, but the anthracnose model predicted high risk for Butte-W and Fresno-W. My own evaluation of this forecasted amount of rain, however, suggests a low risk for anthracnose. Forecasted low LW and moderate temperatures (Table 2) are predicted that will result in zero risk for Alternaria leaf spot and for scab sporulation in all regions. Bacterial spot on cv. Fritz in Butte-W and Fresno-W has a high risk with values of 1.1 and 6.4, respectively. Forecasted temperatures are very stable (e.g., avg. temperature varying up to 6°C in most regions) and moderate although in-canopy humidity is overall high especially around irrigation events (Table 2). This suggests that localized leaf wetness can still occur with large temperature changes, and thus, site-monitoring should be done in high-risk locations for Alternaria leaf spot and scab. A summary of selected forecasted environmental conditions in the coming week is shown in Table 2.

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>).

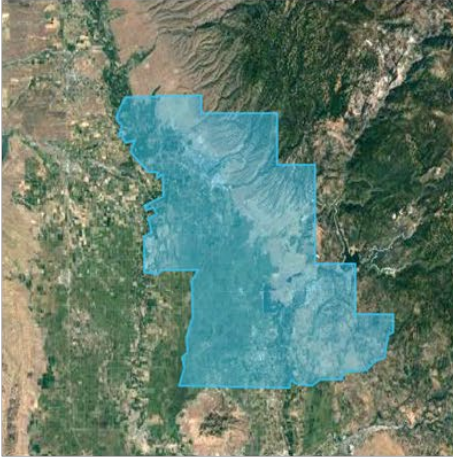
**Table 2.** Forecasted weather for Thur., June 1 through Thur., June 8, 2023\*

No.	County	Region	Date	Avg Temp (in canopy) °C	Avg Humidity (%)	Precip. (mm)	Leaf Wetness (avg/week, hours/day)
1	Butte	West	6-1 to 6-8	20.9 to 26.6	38.0 to 65.8	6-5: 0.8	<1; 6-5: <1
2	Colusa	East	6-1 to 6-8	20.2-26.5	42.6 to 63.6	0	0
3	Fresno	Central	6-1 to 6-8	21.2 to 26.6	36.0 to 56.8	0	0
4	Fresno	East	6-1 to 6-8	21.0 to 26.8	41.7 to 61.9	0	0
5	Fresno	West	6-1 to 6-8	20.3 to 24.9	31.5 to 59.9	6-7: 1.9	<1; 6-7: <1
6	Kern	Central	6-1 to 6-8	21.0 to 25.5	35.2 to 57.4	0	0
7	Kern	East	6-1 to 6-8	20.9 to 25.8	36.4 to 61.9	0	0
8	Kern	West	6-1 to 6-8	20.7 to 26.5	34.2 to 58.6	0	0
9	Madera	Central	6-1 to 6-8	20.5 to 26.0	40.2 to 60.8	0	0
10	Merced	Central	6-1 to 6-8	19.6 to 25.9	39.4 to 60.5	6-7: 0.02	0
11	Stanislaus	Central	6-1 to 6-8	18.6 to 25.2	39.8 to 61.9	0	<1; 6-1: 1
12	Stanislaus	East	6-1 to 6-8	18.8 to 25.6	41.8 to 62.7	0	<1: 6-1; 4
13	Stanislaus	West	6-1 to 6-8	18.1 to 25.1	42.4 to 63.8	0	0

**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

