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 29 through Thur., July 6, 2023*

No.	County	Region	Alternaria leaf spot (date, value, level)^	Anthracnose (date, value, level)^	Bacterial spot (date, value, level)^	Almond scab sporulation level (date, LW value, Precip.)^
1	Butte	West	0	0 (21-day index 0.29 to 0) <mark>Low</mark>	0	0
2	Colusa	East	0	0	0	0
3	Fresno	Central	0	0	0	0
4	Fresno	East	0 (7-day index=1 to 0; Season DSV=6) Low	0	0	0
5	Fresno	West	0	0	0	0
6	Kern	Central	0	0	0 (7-day index 0.04 to 0) Low	0
7	Kern	East	0 (7-day index=2 to 0; Season DSV=59) <mark>Mod.</mark>	0	0	0
8	Kern	West	0	0	0	0
9	Madera	Central	0	0	0	0
10	Merced	Central	0	0	0	0
11	Stanislaus	Central	0	0	0	0
12	Stanislaus	East	0	0	0	0
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.

Industry Advisory - Summary for Selected Almond Growing Regions

Accumulated hours of leaf wetness (LW) in several regions last week resulted in continued scab sporulation and Alternaria leaf spot risk. Accumulated LW was high for Kern-E with 56 h; moderate for Fresno-C, -E with 23-40 h, and Stanislaus-W with 29 h; and 0 to low for the remaining regions with 0 mm precipitation in all regions. Overall, Kern-E still has the highest seasonal DSV. Monitoring scab twig lesions for sporulation and assessing leaves and fruit for scab or leaves for Alternaria leaf spot should be done routinely to verify forecasts (i.e., weekly or bi-weekly). Fungicides should be applied on a schedule with additional LW and DSV accumulation to reach action or critical levels starting three weeks after the last application.

In the coming week, no rainfall and LW, and warming temperatures of 23.6-34.6 C are predicted for all regions (Table 2). There is a zero risk for Alternaria leaf spot in most regions, but risk is moderate in Kern-E and low for Fresno-E (Table 1). There is zero risk forecasted for anthracnose and bacterial spot in all regions except Butte-W and Kern-C, respectively, with low risk. With warm temperatures, low humidity, and no LW, scab sporulation is forecasted to be zero. All other regions are at zero risk for summer foliar and fruit diseases. A summary of selected forecasted environmental conditions in the coming week is shown in Table 2. Again, these are regional forecasts and favorable microclimates may exist that emphasize monitoring orchards based on the orchard's disease history in previous years.

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).

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

Table 2. Forecasted weather for Thur., June 29 through Thur., July 6, 2023*

No.	County	Region	Date	Avg Temp (in canopy) °C	Avg Humidity (%)	Precip. (date: mm)	Leaf Wetness avg. h (date: h)
1	Butte	West	6-22 to 7-6	26.7 to 32.8	21.1 to 54.8	0	0
2	Colusa	East	6-22 to 7-6	25.1 to 31.8	24.5 to 55.6	0	0
3	Fresno	Central	6-22 to 7-6	25.3 to 32.6	22 to 51.4	0	0
4	Fresno	East	6-22 to 7-6	26.0 to 32.7	24.9 to 52.4	0	0
5	Fresno	West	6-22 to 7-6	25.4 to 30.6	19.1 to 42.4	0	0
6	Kern	Central	6-22 to 7-6	26.3 to 32.3	22.8 to 49.8	0	0
7	Kern	East	6-22 to 7-6	26.7 to 34.6	21.6 to 53.4	0	0
8	Kern	West	6-22 to 7-6	27.2 to 33.3	23.0 to 44.4	0	0
9	Madera	Central	6-22 to 7-6	25.4 to 32.2	25.1 to 51.5	0	0
10	Merced	Central	6-22 to 7-6	25.3 to 32.1	23.1 to 51.7	0	0
11	Stanislaus	Central	6-22 to 7-6	23.7 to 30.9	24.1 to 51.4	0	0
12	Stanislaus	East	6-22 to 7-6	24.3 to 31.7	23.4 to 52.6	0	0
13	Stanislaus	West	6-22 to 7-6	23.6 to 31.4	22.0 to 54.8	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.

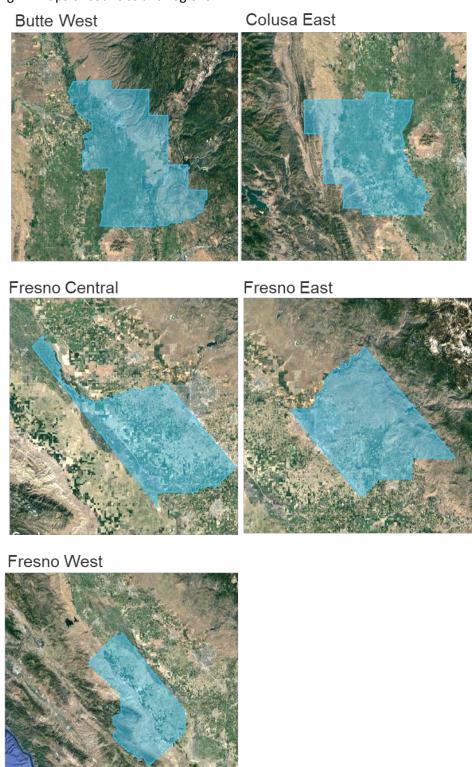


Fig. 2. Maps of counties and regions.

