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., Jun. 8 through Thur., Jun. 15, 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 (7-day index=1; Season DSV=3) Low	6-11 to 6-12: 1.32 to 0.11 (5-day index=0.36 to 1.43) High	6-11 to 6-12: 3.17 to 0.32 (7-day index=1.7 to 5.2) High	0	
2	Colusa	East	0	0	6-12: 0.17 (7-day index=0.17) Low	0	
3	Fresno	Central	0 (Season DSV=1) Low	0	0	0	
4	Fresno	East	0 (7-day index=0-1; Season DSV=5) Low	0	0 (7-day index=0)	6-12: 3 h; 0; High	
5	Fresno	West	0	0 6-11: 0.88 (7-day index=0.88) High		0	
6	Kern	Central	0	6-11: 0.91 (5-day index 0.91) High	6-11: 3.65 (7-day index=3.65) High	0	
7	Kern	East	0 (7-day index=8 to 2; Season DSV=41) Low	6-11: 1.73 (5-day index 1.73) High	6-11: 3.66; (7-day index=5.5 to 3.6) High	6-11: 1 h; 1.72; High	
8	Kern	West	0	0	6-10: 0.91; (7-day index=1.12) High	0	
9	Madera	Central	0 (7-day index=0; Season DSV=3) Low	` ' ' 0		0	
10	Merced	Central	0	0	0	0	
11	Stanislaus	Central	0	0	0	6-12: 0 h; 0.65; Med.	
12	Stanislaus	East	0	0	0	6-12: 1 h; 1.1; Med.	
13	Stanislaus	West	0	0	0	6-12: 0 h; 0.51; Med High	

^{* - 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

Last week's accumulated hours of leaf wetness and precipitation in several regions resulted in some scab sporulation risk: High - Fresno-E, Kern-E, and Stanislaus-W with 28, 61, and 23 h LW and 0, 9.7, and 0 mm precipitation, respectively; Medium - Butte-W, Fresno-C, and Kern-C with \geq 14, 16, and 12 h LW and 1.63, 0, 19.42 mm precipitation, respectively; and Low - Stanislaus-C and -E with 2 to 3 h LW and 0.65 to 1.1 mm precipitation, respectively. Average in-canopy temperatures were moderate (20-21 C) across all the regions.

In the coming week, rainfall and moderate temperatures are predicted in some regions (Table 2) resulting in high risk for anthracnose in Butte-W, Kern-C, and Kern-E, high risk bacterial spot in Butte-W, Fresno-W, Kern-C, -E, -W, and high risk of scab sporulation in Fresno-E, Kern-E, and Stanislaus-W (Table 1). As temperatures warm during the day and cool at night, this will result in greater risk of leaf wetness. Again, the risk for all the diseases mentioned is driven by repeated leaf wetness from dew and rainfall that is needed to initiate epidemics, as well as forecasted warm temperatures that are driving the rate of development. 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 (https://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 8 through Thur., June 15., 2023*

No.	County	Region	Date	Avg Temp (in canopy) °C	Avg Humidity (%)	Precip. (date: mm)	Leaf Wetness avg. h (date: h)
1	Butte	West	6-8 to 6-15	20.7 to 25.2	48.1 to 63.0	6-11, 6-12: 0.2, 0.41	<1
2	Colusa	East	6-8 to 6-15	20.1 to 24.4	52.3 to 65.5	6-8, 6-12: 0.02, 0.35	<1
3	Fresno	Central	6-8 to 6-15	20.1 to 24.9	47.7 to 62.1	0	0
4	Fresno	East	6-8 to 6-15	20.6 to 25.1	53.8 to 66.6	0	<1 (6-12: 3 h)
5	Fresno	West	6-8 to 6-15	18.8 to 23.2	49.1 to 64.3	6-11: 0.01	<1
6	Kern	Central	6-8 to 6-15	18.9 to 23.8	48.1 to 65.7	6-11: 0.8	<1
7	Kern	East	6-8 to 6-15	20.3 to 25.6	51.9 to 68.4	6-11: 1.72	<1 (6-11: 1 h)
8	Kern	West	6-8 to 6-15	19.7 to 24.0	49.1 to 63.5	6-10: 0.01	<1
9	Madera	Central	6-8 to 6-15	19.6 to 24.3	50.4 to 65.7	0	0
10	Merced	Central	6-8 to 6-15	19.4 to 23.9	49.8 to 66.0	0	0
11	Stanislaus	Central	6-8 to 6-15	19.3 to 22.8	52.0 to 66.1	6-12: 0.65	<1
12	Stanislaus	East	6-8 to 6-15	19.9 to 23.1	53.2 to 66.9	6-12: 1.1	<1 (6-11: 1 h)
13	Stanislaus	West	6-8 to 6-15	19.8 to 22.7	50.6 to 66.2	6-12: 0.51	<1

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.

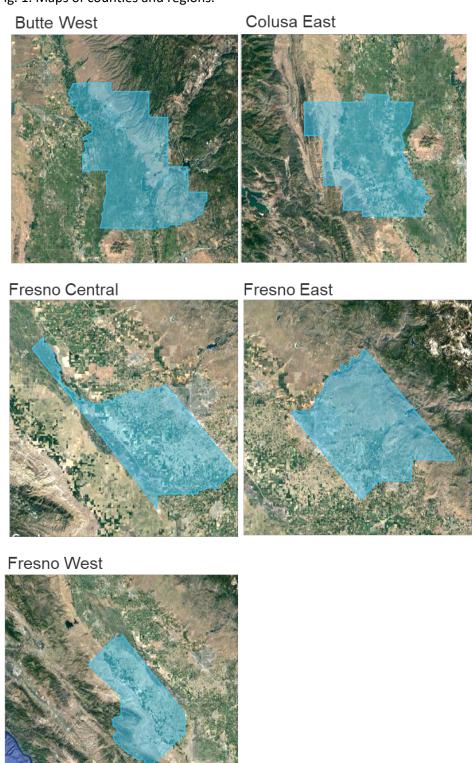


Fig. 2. Maps of counties and regions.

