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

Table 1. Daily risk assessment disease forecasts for Wed., April. 19 through Thr., April 27, 2023*

No.	County	Region	Alternaria leaf spot (date, value, level)^	Anthracnose (date, value, level)^	Bacterial blast (date, value, level)^	Bacterial spot (date, value, level)^	Green fruit rot (date, precipitation, 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: 24 h wetness last week; low
5	Fresno	West	0	0	0	0	0; 56 h leaf wetness last week; low
6	Kern	Central	0	0	0	0	0
7	Kern	West	0	0	0	0	0
8	Kern	East	0	0	0	0	0: 16 h wetness last week; low
9	Madera	Central	0	0	0	0	0: 39 h wetness last week; low
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: 10 h wetness last week; low

^{* - 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

Low precipitation occurred in a few regions last week. For 4/13 to 4/19, precipitation totals of 0.04, 0.50, 0.51, and 0.20, mm occurred in Fresno-East, Stanislaus-Central, Stanislaus-East, and Stanislaus-West, respectively. Average in-canopy temperatures were cool (10.1 to 17.6°C) across the regions and favorable for *Botrytis cinerea* to cause jacket rot/green fruit rot. Leaf wetness allows *Botrytis cinerea* and other fungi to grow from senescing flower parts into healthy developing fruit. The pathogens of green fruit rot can still grow at cool temperatures. Therefore, areas that had some rainfall should be scouted for green fruit rot, especially in cultivars with high fruit set, and management practices should be applied to prevent this disease.

In the coming week, no rainfall is predicted and low to moderate temperatures will result in a zero risk for Alternaria leaf spot, anthracnose, bacterial blast, and bacterial spot for all regions (see Table 1). Last week with accumulated leaf wetness from 10-56 h across all regions, green fruit rot still remains at low risk for 5 regions (Table 1). Bacterial blast samples (i.e., twig dieback), brown rot blossom blight (spur and shoot dieback), and green fruit rot that are currently being submitted to my lab are positively identified for these three diseases. These diseases that resulted during the cold wet weather events in Feb. - March during bloom are developing symptoms with the warmer conditions experienced in the last several weeks. With no precipitation, low to moderate temperatures, and low leaf wetness in the coming week (Table 2), forecasted risk for all diseases is zero to low in the coming week.

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 Wed., April 19 through Thursday, April 27, 2023*

No.	County	Region	Date	Avg Temp (in canopy) °C	Avg Humidity (%)	Precip. (mm)	Leaf Wetness (hours/day)
1	Butte	West	4-20 to 4-27	12.7 to 21.9	37.0 to 51.5	0	0
2	Colusa	East	4-20 to 4-27	13.6 to 22.1	38.0 to 55.0	0	0
3	Fresno	Central	4-20 to 4-27	14.9 to 22.6	44.1 to 59.7	0	0
4	Fresno	East	4-20 to 4-27	16.6 to 23.0	45.1 to 64.1	0	<1 (4/20: 6 h)
5	Fresno	West	4-20 to 4-27	16.3 to 21.7	36.2 to 48.3	0	0
6	Kern	Central	4-20 to 4-27	13.7 to 22.8	40.4 to 56.0	0	0
7	Kern	East	4-20 to 4-27	12.9 to 24.3	41.7 to 57.9	0	0
8	Kern	West	4-20 to 4-27	14.6 to 22.9	39.6 to 52.4	0	0
9	Madera	Central	4-20 to 4-27	17.1 to 21.6	47.2 to 64.7	0	<1 (4/20-4/21: 2 h)
10	Merced	Central	4-20 to 4-27	15.4 to 21.2	50.1to 61.5	0	0
11	Stanislaus	Central	4-20 to 4-27	14.8 to 20.6	53.1 to 61.7	0	0
12	Stanislaus	East	4-20 to 4-27	13.4 to 20.8	52.1 to 64.7	0	<1 (4/20-4/21: 4 h)
13	Stanislaus	West	4-20 to 4-27	14.8 to 21.3	45.2 to 59.2	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.

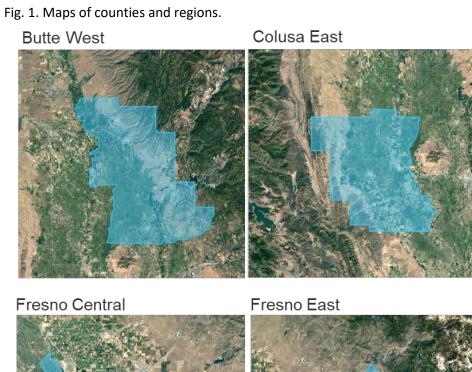








Fig. 2. Maps of counties and regions.

