

2016 - 17 precipitation totals are much higher than normal

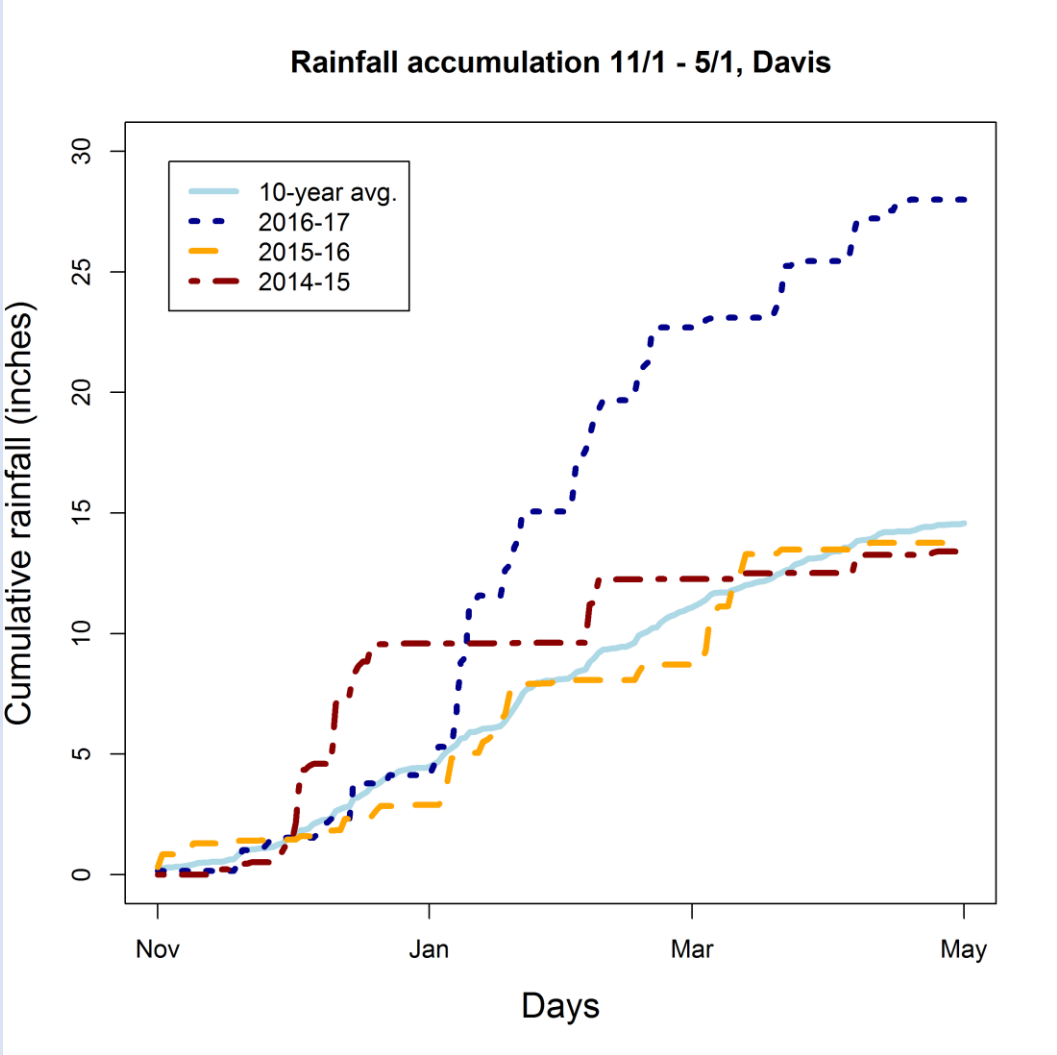


Figure 1. Rainfall accumulation for 2016-2017 season as compared to previous 2 seasons and 10-year average.

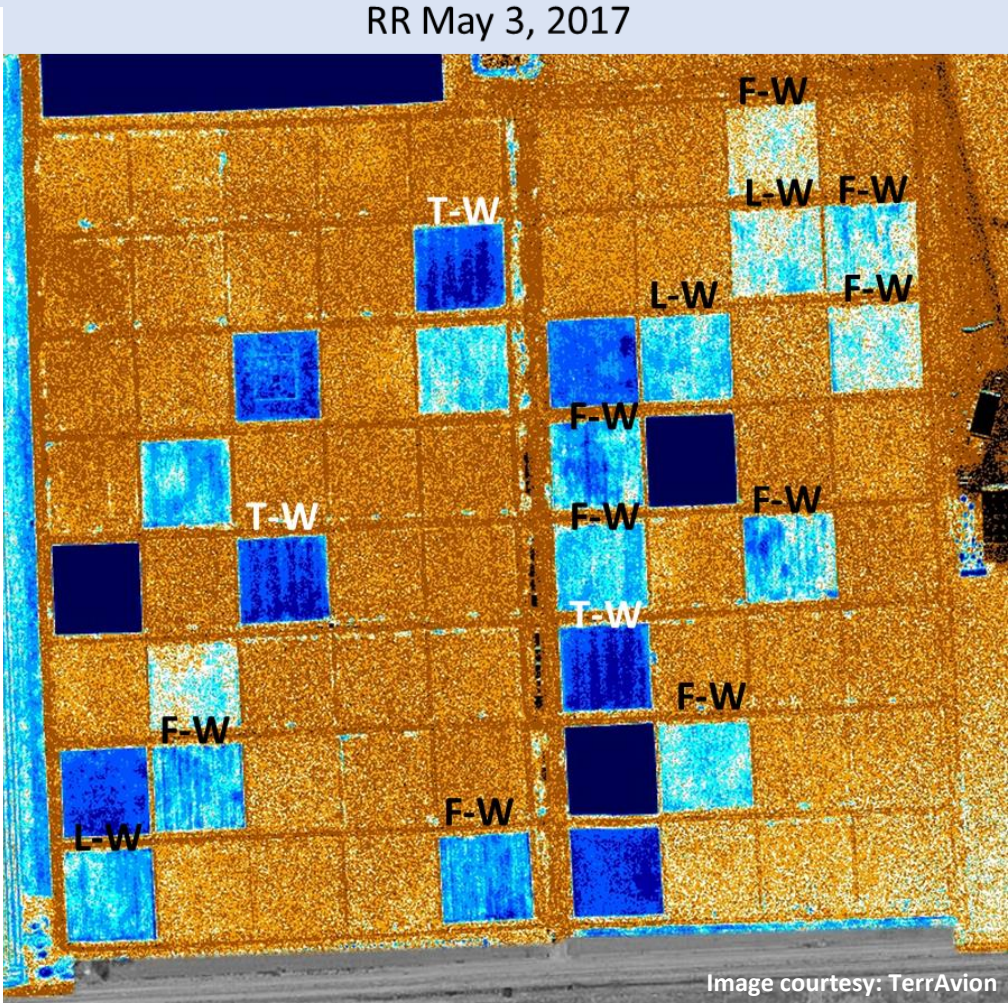


Figure 2. Aerial NDVI image of Russell Ranch long-term experiment taken on May 3, 2017. Plots with black lettering (F-W & L-W) indicate fallow-wheat and legume-wheat year-over-year rotations in place for more than 20 years. Plots with white lettering indicate tomato-wheat (T-W) rotations. Darker blue indicates more biomass and demonstrates the difference in disease susceptibility between the winter-only rotations and the tomato-wheat rotations. Take-all (*Gaeumannomyces graminis* var. *tritici* (Ggt)) is the suspected disease agent, which is most often observed in continuously cropped wheat and is more prevalent under continuously moist soil conditions.

Cooler than recently, but not cooler than average

GDD accumulation 11/1 - 5/1, Davis

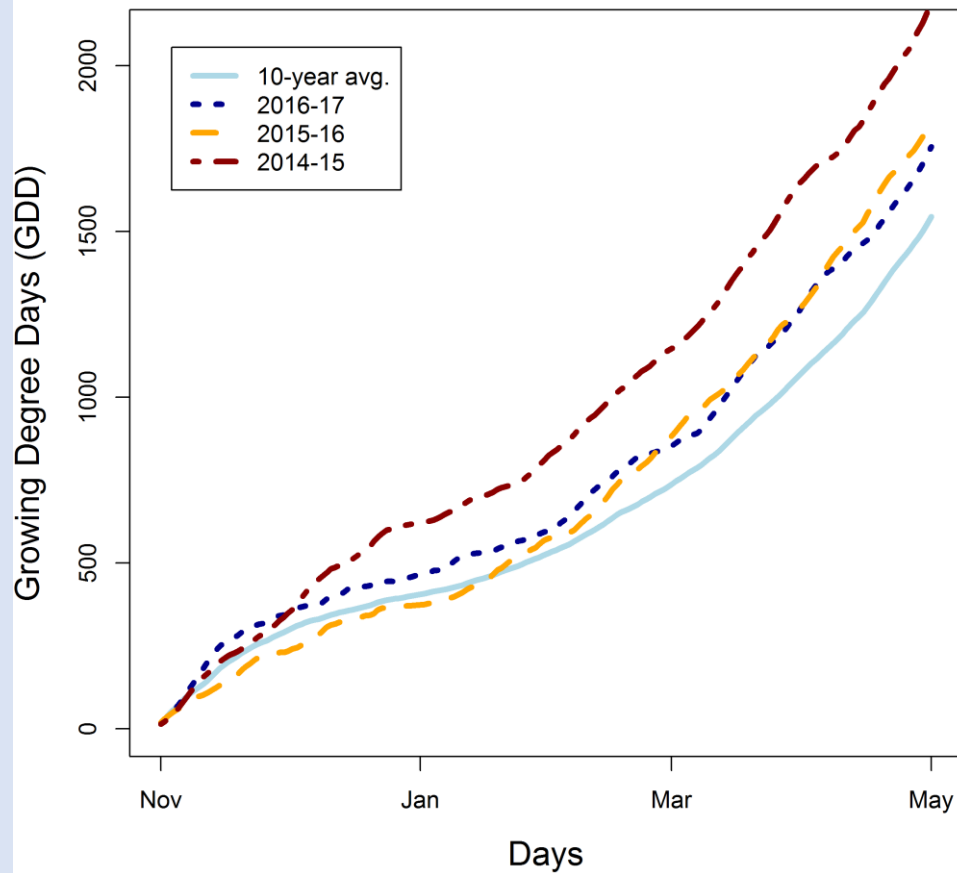


Figure 3. Growing degree day (GDD) accumulation for the 2016-2017 season as compared to previous 2 seasons and 10-year average.

Daily Minimum Temperature 11/1 - 5/1, Davis

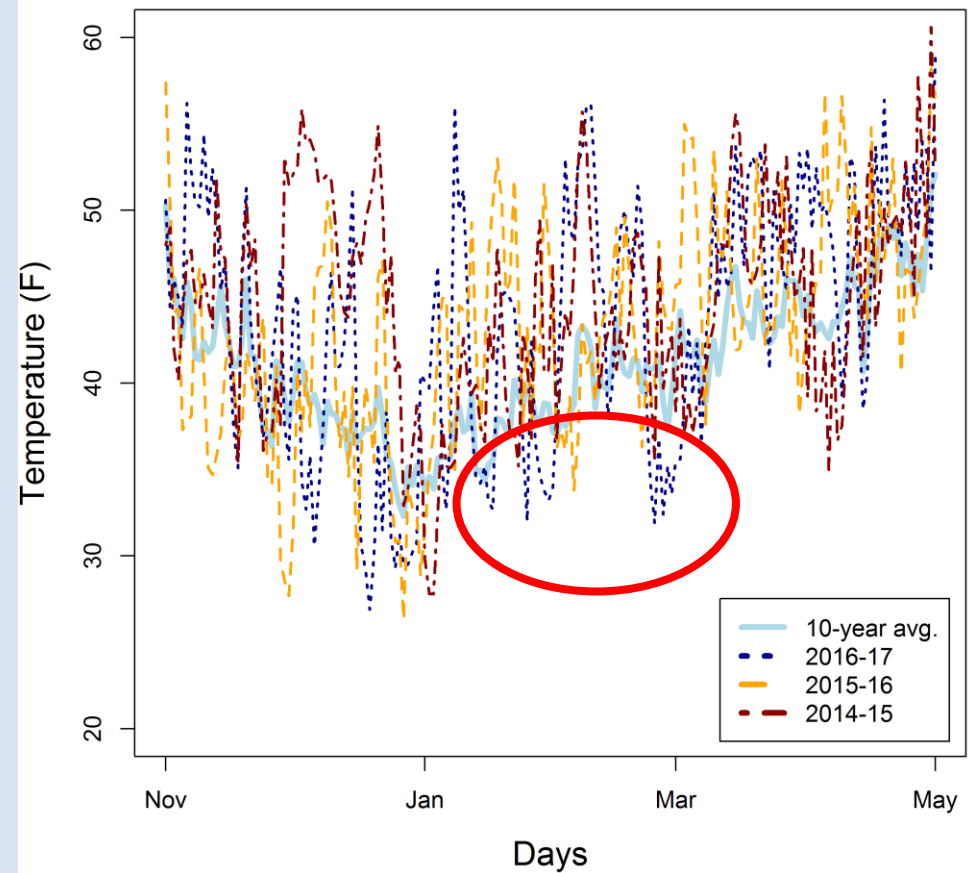


Figure 4. Daily minimum temperatures for the 2016-2017 season as compared to previous 2 seasons and 10-year average. Emphasis (red circle) placed on colder than normal/near-freezing temperatures in February and March. We have observed head deformation in parts of the trial that may be related to late-season frost.