**Don’t Let High Temperatures Damage Grapes**

It’s not just people who need to beat the ever-increasing California temperatures these days. Grape growers are finding that ill-timed heat waves can have negative effects on their vineyards.

As temperatures rise, grapevines enjoy increased metabolic activity leading to growth. But at about 95°F, physiological activity declines and vines can sustain damage.

Ashraf El-Kereamy, a viticulture and small fruits advisor at the University of California Cooperative Extension in Kern County, [says there are things growers can do](http://ucanr.edu/sites/viticulture-fresno/newsletters/Vit_Tips_Previously_newsletter_VineLines62666.pdf) to prepare for or protect their vines from extreme heat, which he expects much of California’s grape-growing region to experience this summer.

“Right now, keep an eye on the grapes and keep watering them. When you have the heat stress and the water stress, that’s double stress.The vines don’t tolerate those two together,” El-Kereamy says.

Heat and water stress affect grapes differently throughout the season.

Early in the season, high temperatures can reduce leaf area, and berry and shoot shriveling can occur. In the blooming season, heat can cause excessive shatter, reducing the number of berries per cluster. After fruit-set, heat can inhibit berry growth and cause scarring or cracking. And high temperatures can inhibit ripening, giving the grapes an off color.

Throughout the growing year, El-Kereamy suggests:

* Developing a strong canopy in the cooler early months.
* Keeping vineyards watered during prolonged heat waves.
* Developing good canopy management practices to protect clusters from direct sunlight
* Rethinking shoot thinning or hedging during high temperatures.
* Using cultural practices or foliar sprays that increase vine amino acid content.
* Scouting after heat waves for pests and diseases that may crop up.

Finally, El-Kereamy suggests spraying for pests or diseases in the early morning or late afternoon hours when temperatures are more mild.

“Try to avoid spraying anything in the middle of the day when it’s too hot,” El-Kereamy says. “When it is very hot and we spray the vines, we may get some leaf burn. We try to avoid that.”