

University of California Cooperative Extension



Kern County • 1031 S. Mt. Vernon Avenue • Bakersfield, CA 93307 • 661-868-6200

June 7, 2006

Jennifer Hashim-Buckey, Farm Advisor Viticulture and Small Fruits (661) 868-6223

Spring Table Grape Quality Update for the Southern San Joaquin Valley

The 2006 table grape growing season has been a weather rollercoaster. A mild winter advanced the season by a couple of weeks, but a very cool, wet March and April brought vine growth and development to a screeching halt. As May approached, so did the warm weather and by all accounts growers are back on a normal schedule. The bloom period (mid-May) in early districts was extremely rapid, sending growers scrambling to complete gibberellic acid (GA) sprays to reduce berry set. For those that favor double GA applications during bloom, the window of time between the 1st and 2nd application was narrow, or only a couple of days.

In general, growers have been pleased with the degree of berry thinning (shatter) achieved, particularly in Thompson Seedless. But there have been a few reports of over-shatter in young and/or vigorous vineyards and in varieties such a Flame Seedless, Princess, Summer Royal and Autumn Royal. While excessive shatter in most varieties was likely due to very warm temperatures (>90°F) during bloom and high rates of GA, the loss of fruit and clusters in Princess vineyards are more likely due to physiological problems characteristic of the variety that induce poor berry set and a disorder called 'early bunch stem necrosis' (EBSN), or 'inflorescence necrosis.' EBSN is a disorder that results in the dieback of a portion, or the entire cluster just prior to or just shortly after bloom. Some studies indicate that the damage results from a temporary accumulation of ammonia in the cluster, while others state that it is due to poor carbohydrate availability during bloom. At this time, little can be done to control the severity of EBSN. However, we have initiated a small-scale study this spring to examine the effects of molybdenum and the synthetic cytokinin forchlorfenuron (CPPU) on the fruit set and EBSN of Princess table grapes. The results of this project will be available this fall.



Early bunch stem necrosis (EBSN), or inflorescence necrosis of Princess table grapes. 2006.