

## **Foothill Grape Day Informs Growers on Local Research, Vine Water Transport, and Zinfandel**

Lynn Wunderlich, UC Cooperative Extension Farm Advisor

Foothill Grape Day, an annual educational meeting for foothill wine grape growers and winemakers sponsored and organized by the University of California Cooperative Extension-Central Sierra Farm Advisor Lynn Wunderlich, was deemed a success once again this year. The meeting, held Thursday, June 5 at the Amador county fairgrounds, provided 90 attendees with information to help them produce quality wine grapes in the foothills. In addition to presentations by UC and USDA researchers, a special grower/winemaker panel discussed the challenges and opportunities with growing Zinfandel.

Two current foothill research projects were highlighted: work with UC Davis Plant Pathologist Dr. Doug Gubler and his graduate student Brianna McGuire on using the powdery mildew index; and work with USDA-ARS researchers Ruby Stahel and Dr. Kerri Steenwerth investigating approaches to managing noxious weeds in foothill vineyards. Rhonda Smith, UCCE Sonoma Viticulture Advisor, gave an update on Red Blotch disease, a newly discovered virus affecting grapes. Smith has been doing research on Red Blotch and its effect on juice quality and has found an increase in malic acid levels and a decrease in Brix in vines infected with the virus, whether clusters were dropped or not, in experiments she conducted in Sonoma County.

Local UCCE Farm Advisor Wunderlich presented her work on powdery mildew. As little as 3% infection of the powdery mildew fungus in wine grapes can cause a decrease in quality, Wunderlich said, which is why it is considered the most important disease of grapes. The goal of her work is to reduce unnecessary mildew sprays while maintaining grape quality. She has worked with Amador county grower Pat Rohan, Renwood Winery, and the Amador Winegrowers Association to place two powdery mildew weather stations in vineyards in the Shenandoah Valley in Amador County. Two more stations were placed this year in El Dorado County. The weather stations collect data from the vine canopy that is used to calculate a powdery mildew index that can help tell growers when to treat. UC is collaborating in the project by making the mildew index publicly available on the UCIPM website at <http://www.ipm.ucdavis.edu/>.

Andrew McElrone, USDA Research Scientist affiliated with the Department of Enology and Viticulture at UC Davis, gave a very special presentation on “How grape vines use water: a journey through the vine’s vascular system”. McElrone has conducted experiments where he has placed vines in a catscan-like machine to perform neutron radiography. The machine allows him to see how water moves through the water conducting tissue of the vine under different conditions. His work has shown that rootstocks like 110R, a popular one for the foothills, helps conserve water in the vine by allowing water in and limiting the “leakiness” of the root during dry conditions.

The meeting ended with a grower/winemaker panel on Zinfandel. Panelists included Tegan Passalacqua, winemaker and vineyard manager for Turley Wine Cellars, Chris Leamy, Terra d'Oro winemaker and vice-President for Zinfandel Advocates and Producers (ZAP), and Kevin Steward, vineyard manager for Trinchero Family Estates. Passalacqua prefers organically grown and dry farmed grapes. He considers Zinfandel from the foothills akin to Italian Barolo for its light color. Passalacqua considers canopy management key for organic growing because it opens up the canopy to light which can be a "sanitizer" for grape disease. Kevin Steward discussed the many trials he has with Zinfandel. He has found that he can grow Zinfandel successfully using a quadrilateral trellis. Steward also stressed the importance of giving back to the vine in the form of fertilizer when needed. Chris Leamy noted that foothill Zinfandel is special because the foothills are one of the few California grape growing areas without an ocean influence. Although the Zinfandel market is a bit flat right now, Leamy noted that Zinfandel blends are on an upswing.

The meeting ended with a light lunch and wine tasting of wines donated by attendees.