

Missouri Grape & Wine Conference write-up

The 2023 Missouri Grape and Wine Conference was held in March 2-3 in Columbia, Missouri. The conference opened up with a presentation called “Beyond the Fault Line” by Stephan Sommer, enology leader at the Grape & Wine Institute at the University of Missouri. This presentation featured 6 wines that were “faulty”: ethyl acetate, acetic acid, Brettanomyces, oxidation, reduction, plus one clean wine. This presentation emphasized regular sensory training to improve sensitivity and recognition. Sommer also noted several winemaking techniques to prevent faults, as well as reactive techniques when faults appear. He emphasized that prevention is always the easiest step!

The afternoon featured a symposium of presentations from doctoral students from Missouri State, University of Missouri, and St. Louis University. Several of these projects featured genetic research of several interspecific cultivars, as well as research on common viruses in grapevines and common insects in the Midwest. The afternoon concluded with an update on the industry in Missouri, including a discussion of features of the new Farm Bill, nutritional labeling, and a new grant opportunity for Missouri grape growers.

Friday began with a “year in review” from Dean Volenberg, viticulture extension leader at the Grape & Wine Institute at the University of Missouri, about the state of Missouri vineyards. In October, Missouri had a killing frost which created a challenge for late-ripening cultivars like Norton. Dr. Volenberg discussed critical periods of disease management, particularly early in the season (important to get sprays on, but don’t need much), and immediate pre-bloom and post-bloom, which is when the berries are developing resistance to powdery and downy mildew and black rot. Dr. Volenberg reminded us to keep a watch for spotted lanternfly—has been seen in Indiana and Kentucky. The presentation was concluded with a lively discussion of Norton and Cynthiana. We are still uncertain if Cynthiana is a clone of Norton or if it is a standalone varietal. Genetic sequencing is only one way to identify the similarities of these two cultivars, but it does not provide a comprehensive picture (only looks at a few markers)—we must also rely on our physical observations.

Jacob Corcoran from the USDA gave a presentation about preventing the spread of grape leafroll which is spread by grape mealybugs, which have piercing-sucking mouthparts. He discussed some of the life cycle and mating behaviors of the grape mealybug. His improved strategy included exploiting the pheromones by setting traps, allowing natural predators to thrive, and also disrupting the mating period.

Dave Kang from the USDA presented fascinating (and complex) research about statistical modeling of the microbiome of spotted wing drosophila. These fruit flies have become resistant to insecticides, and with the data, Kang plans to research microbial-based methods of control.

In the afternoon, Aude Watrelot from Iowa State University presented about winemaking techniques that could help hybrid winemakers create dry reds. Her talk discussed the difficulties in low tannin-high anthocyanin hybrid cultivars. She and her team tried several different techniques to determine if they could increase the amount of tannin, including Accentuated Cut Edge Maceration (essentially just an immersion blender which tears up the skins), including whole clusters, and post-fermentation maceration. There are many other tools a winemaker can try, but it will all depend on cultivar and location.

Stephan Sommer led a great talk about the anticipated enactment of nutritional label requirements. The European Union will implement requirements for the 2023 vintage, beginning on December 8. Sommer encouraged American winemakers to begin thinking about strategies for nutritional labeling, as it is expected that the US will follow the EU. The EU is still hammering out some of the details, but Sommer indicated what will be required including nutrition facts, ingredient list, and allergen statements (including “contains sulfites”). He encouraged winery owners to educate their consumers about what the new information will mean. How can winemakers still convey the winemaking tradition without the label looking like a manufactured product like Coca-cola?

Ed Swanson wrapped up the conference with a discussion of his grapevine breeding career, including the difficulties of growing in Nebraska (challenges including but not limited to 2-4-D, Dicamba, extreme cold, fluctuations in temperature). We tasted two wines of varietals that he thinks could be commercially promising.