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September 2004

The Technology Of *Terroir* At To Kalon

Larry Walker

Andy Beckstoffer, who farms more than 3,000 acres of vines in Napa, Mendocino and Lake counties in Northern California, took an

important step this summer in framing a definition of *terroir*, an issue that not many growers (or winemakers for that matter) were paying much attention to in California a few years ago.

Coming out of Prohibition, California viticulture was all about weather and a quasi factory-farming approach. Often, the attitude was that the soil was just there to hold the roots in place so the vines wouldn't fall over. That may be overstating it, but, in general, California growers considered *terroir* a concept the French had invented to give their wines an edge in the world market.

That has been changing for well over a decade, as growers, with a wider choice than ever of rootstocks and clones, have become increasingly aware that dirt is where it's at. What "it" is may not be clear, but that is exactly what Beckstoffer is trying to establish with a series of tastings of Cabernet Sauvignon. The wines are made by four different vine-ries from grapes grown in the portion of the historic To Kalon vineyard owned by Beckstoffer.

"In the 1970s, we had basically one clone and one rootstock, and the vines were all diseased," Beckstoffer said at the tasting, held at the Beckstoffer Farm Center on Conn Creek Road in Napa. "We can do so many things now that we couldn't begin to do then. People talk about hang time; you couldn't let the grapes hang then, because the vines were so diseased the grapes would shrivel up."



Outlined in red, Beckstoffer's 89-acre To Kalon vineyard in Oakville nurtures grapes for some of Napa's finest Cabernets.

During the tasting, Beckstoffer said that much of the progress of the last decade (following the replanting in Napa due to phylloxera) is the result of technology. "All of the changes—the development of different trellis systems, the leaf pulling and the clonal and rootstock experiments, among other things—have all contributed to improvements in the grapes, which have led to better wines," he said.

"When we first started talking about microclimates, people like André Tchelistcheff would mention the differences between Carneros and Rutherford. After a while, we began to talk about differences within the district. Today, we are dealing with the microclimate of the grape cluster. We are looking at how many leaves are shading the cluster, whether one cluster is hitting another, what is the humidity around the cluster," he said. "We are farming by the cluster."

It is an approach to viticulture that no one was even thinking of 20 years ago, or even 15 years ago. So what's next?

"Information technology," Beckstoffer said. "We are building a database on how to grow winegrapes. We have weather sensors, moisture sensors, all sorts of ways to keep track of the grapes. What we need to do now is figure out what that data means."

David Beckstoffer, who is president of

the Beckstoffer farming company, (beckstofferwineyards.com) said he also expects work to go forward on isolating flavor development in the grape and how to translate that to the wine.

The historic To Kalon vineyard was first planted by Hiram W. Crabb in the 1870s. According to wine historian Charles Sullivan, Crabb had one of the largest collections of vines in the world, with more than 400 varieties in his nursery catalog. He also made his own wine from To Kalon, and it was a commercial success. His Zinfandel and "burgundy" took gold medals at the San Francisco Midwinter Fair of 1894.

After Crabb's death in 1899, the vineyard was sold to E.S. Churchill. The To Kalon label was maintained until Prohibition. In 1943, 89 acres of the original property was sold to Beaulieu, and was farmed as Beaulieu Vineyard #4. Andy Beckstoffer bought the vineyard in 1993.

Turning to the specifics of the tasting, Dave Michul, manager for Beckstoffer's To Kalon vineyard, said many elements go into the success of wines from To Kalon, but in the end, it really comes down to the soil, which is gravelly loam with some clay. There is not a lot of rooting depth, and it is low in fertility. Vines are planted relatively close, with 1,037 vines per acre, 6 feet between rows and 7 feet between vines. The

vines are trained to a vertical system. Michul said the focus is on cluster size. He said the cluster capacity of each vine is known, and berry size is moderated through irrigation, with smaller berries being the goal.

All trellising is bilateral cordon, spur pruned with north-south row direction, parallel to the valley. The canopy is managed for limiting exposure to afternoon sun, which can be intense. The canopy is left full on the afternoon sun side.

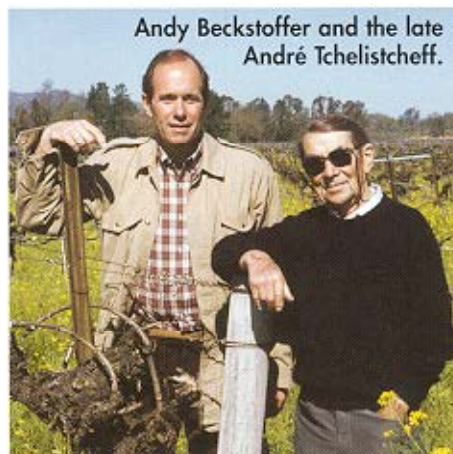
Michul added that it is necessary to farm the vineyard so that it will adapt to the environment of each new vintage. "You can't farm the same way every year," he said.

Only one rootstock is used by Beckstoffer, the Davis 03916, which is resistant to a nematode commonly found in Rutherford and Oakville soils. There are three clones: clone 6, which produces very intense, small thick-skinned berries which are high in anthocyanins; clone 377, which tends to produce elegant tannins and clone 4, which produces plum and cherry fruit with levels of concentration that can vary, depending on the soil structure of the

individual block. Michul said clone 377 produces the most uniform results, while clone 4 is the least uniform.

According to Beckstoffer, Beaulieu did several years of clonal tests, and concluded that, from a winemaking standpoint, clone 6 was the best Cabernet clone. "It yielded very intense fruit, but it was rejected at the time for viticultural reasons—the yields were just too low," he said.

The wines tasted were from Behrens & Hitchcock Winery, Paul Hobbs Winery,



Karl Lawrence Cellars and Schrader Cellars. Winemaking styles varied, as did picking times, even when the same vintage was compared. The harvest date is the only decision completely controlled by the winemaker at Beckstoffer's To Kalon. Otherwise, the Beckstoffer team is in full charge. As Beckstoffer put it, "We run the vineyards, in consultation with the winemaker."

Because of stylistic differences in approach, the tasting was nothing like an evaluation of the vineyard from a strictly *terroirist* focus. It was valuable for demonstrating how the human factor in both farming the grapes and making the wine must be included in any meaningful definition of *terroir*.

If there was one underlying theme it would be the intensity of the fruit, which in every case showed what I would call classic Napa Cabernet character, with fruit tending toward the black cherry-blackberry.

Conclusion? Way too soon to go there, but a very useful start in understanding the new vineyard technology as related to the wine in the bottle. 🍷