



HOW VINEYARD SOILS AFFECT THE TASTE OF YOUR WINE

DAVE MCINTYRE, WASHINGTON POST, MAY 28, 2021



Here's a fun exercise for less than \$25 that will help you explore one of the great mysteries of wine. Two white wines from northern Portugal — the popular light, refreshing vinho verde — made by the same producer, from the same grape variety and in the same manner. The difference? One is made from grapes grown on granite soil, the other from grapes grown on schist. And they taste different. Not a lot, but noticeably so.

Importer Fran Kysela, of Kysela Père et Fils in Winchester, Va., was tasting wines at Adegas Ponte de Lima, a cooperative winery, in January 2019, when he noticed distinctions between two tanks of vinho verde. When he learned that the only difference was the soil type in the vineyards, he decided to bottle them separately. Concept design, label approvals and pandemic-related shipping delays later, the 2020 vintage of Encostas do Lima Vinho Verde Granite and Schist are now in the market.

“The Granite has more bass notes, power and viscosity, while Schist has more aromatics, lightness and acidity,” Kysela told me. “They really do stand out as different and unique.”



To my palate, the Granite is tightly focused and rooted in the earth. The Schist looks to the sky with its aromas of citrus blossom and tropical fruit — it is more diaphanous in texture.

Now I'm not arguing — and neither is Kysela — that you can taste granite or schist in these wines, or that the vines somehow draw minerals directly from the ground into the grapes. But soil clearly influences how a wine tastes.

Wine lovers rhapsodize about terroir, a romantic if imprecise term that explains a wine's "sense of place." The ancient Romans and Greeks noticed that some vineyards produced consistently better wines than others. Cistercian monks identified the best vineyards in Burgundy, which are recognized today as grand cru or premier cru and fetch high prices for their wines. Terroir includes not just soil, but also climate, altitude, the direction a vineyard faces and even the actions of the winemaker.

I wrote a few years ago about an experiment at Pollak Vineyards in Virginia that compared cabernet franc wines grown in different soils just a few feet apart. The wine grown on a mix of gravelly loam and clay soil was deeper in color and more complex in flavor than one grown on simple clay soil.

Of course, most wines we drink are blends from different areas of a vineyard or different vineyards altogether. So does this concept of terroir even matter, in a practical sense? Scientists have tested the legend of terroir, either to debunk it as a myth or to prove it. A recent peer-reviewed study sponsored by the Catena Institute of Wine in Argentina found that it is possible to identify the vineyard a wine was grown in through chemical analysis.

The study analyzed three vintages of malbec wines grown in 23 vineyard parcels smaller than a hectare (2.5 acres) throughout 12 geographical indications (appellations) and six larger zones in Mendoza, Argentina's main wine region. While vintage variations in climate were the most important factor in identifying wines, the researchers were able to point out wines from 11 of the 23 parcels, with the other 12 parcels placed with 83 percent certainty. In other words: Yes, terroir exists and it can be measured.

For more proof that terroir can be tasted, I participated in a recent online tasting for media by Dan Petroski, winemaker of California's Larkmead Vineyards, and geologist Brenna Quigley. Larkmead is located at the "hourglass" point of Napa Valley, squeezed between mountains to the east and west. That means all the



geologic shifts over millennia filtered through this narrow strip of land, giving the vineyards at Larkmead a diverse palette of soils. We tasted three barrel samples of cabernet sauvignon from 2019, vinified in the same way, but grown on parcels of three soil types, about 650 feet apart.

The soil types were gravel, clay and sand, and Petroski said the differences in the wines focused on texture. He described each in terms of soils in a flower pot: Pour water (or wine) over gravel in a pot and the liquid drains quickly around the stones — the gravel wine was lean and focused. Poured over clay, a liquid spreads to the side and then sifts slowly through the dirt — the wine grown on clay was broader, fatter in texture, even a bit thick. With sandy soils, liquid filters through more quickly than clay, but slower than on gravel.

Our tasting didn't include blending the three wines, but I tried it afterward, and my impromptu mix was seamless and delicious. I will be eager to try Larkmead's estate cabernet, a blend of wines from the three soils.

And although this was billed as a "soil tasting," we didn't actually taste the dirt samples included in the package. Petroski did ostentatiously chug a "sample" from a similar test tube, but he quickly admitted it was filled with Oreo cookie crumbs.

After all, we don't have to taste the actual soil to taste its influence on the wine.

Dave McIntyre writes about wine weekly. He also blogs at dmwineline.com.