

Wine terroir goes under the microscope

By Becky Grunewald, Sacramento Bee

UC Davis professor of viticulture and enology, David Mills, knew that he was firing a shot across the bow when he recently presented a scientific paper addressing one of wine-making's most beloved mysteries.

That mystery is the somewhat ineffable concept known as "terroir" – a French word with no English corollary – defined as a wine's unique growing environment that contributes to its distinct aroma and flavor. For many wine experts, terroir is the elusive force that gives a wine its personality. It's why a Cabernet Sauvignon from Bordeaux tastes different from one produced in the foothills.

Traditionally, the explanation of terroir's influence primarily has focused on weather patterns, geography and cultivation techniques, and soil composition. For example, attributes such as "chalkiness" or "minerality" in wine are often attributed to soil, despite a lack of scientific evidence.

Mills, however, reported that unique colonies of yeast, fungus and bacteria on the surface of wine grapes also could be significant in determining a wine's regional quality.

Terroir gets top billing when it comes to French wine, whether it's a bottle from the regions of Bordeaux, Burgundy or Champagne. In the United States, wines are marketed by specific grapes.

When it comes to terroir, microbes haven't always been part of the conversation.

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