



The Riches of Rotundone

USING THE MYSTERIOUS SESQUITERPENE TO GENERATE MEMORABLE RESTAURANT EXPERIENCES

ROTUNDONE, LIKE UMAMI, is one of the more curious phenomena of sensory perception. While it may not be fully understood, it can still prove useful when assessing wines.

First, let's define it: Rotundone is a sesquiterpene, a class of aromatic terpenes commonly found in plants and most strongly in peppercorns but also in wines. In the latter, rotundone is most often associated with so-called "spicy" varieties such as Syrah, Petite Sirah, Zinfandel, and Grenache, though other wines that are sometimes described as "peppery" include Gewürztraminer, Viognier, Grüner Veltliner, Graciano, Mourvèdre, Pinot and Gamay Noir, Cabernet Sauvignon, Merlot, and Touriga Nacional.

Since its formal identification in Australia in 2008, there have been a number of studies of rotundone, particularly in the context of grapes, for the simple reason that peppery qualities in wines are considered positive. The drawback, however, is that researchers also found that as little as 20% of people are capable of readily identifying peppery aromas in wines—which is to say that peppery components are neither here nor there for the majority of consumers.

That said, many of the aromatic attributes of wine as well as of food fall below detectable thresholds. This does not make a wine or dish any less appealing. The beauty of our senses is that sensory qualities can be appreciated whether they are recognized or not. A chef, for instance, may use 15, 25, or 40-plus ingredients in a single dish, but it is not necessary for the average guest to perceive more than four or five of them in order to appreciate the result. The same applies to sensory components in wines.

My professional experience with rotundone goes back to 2000 and 2001—the two vintages of Cabernet Sauvignon—

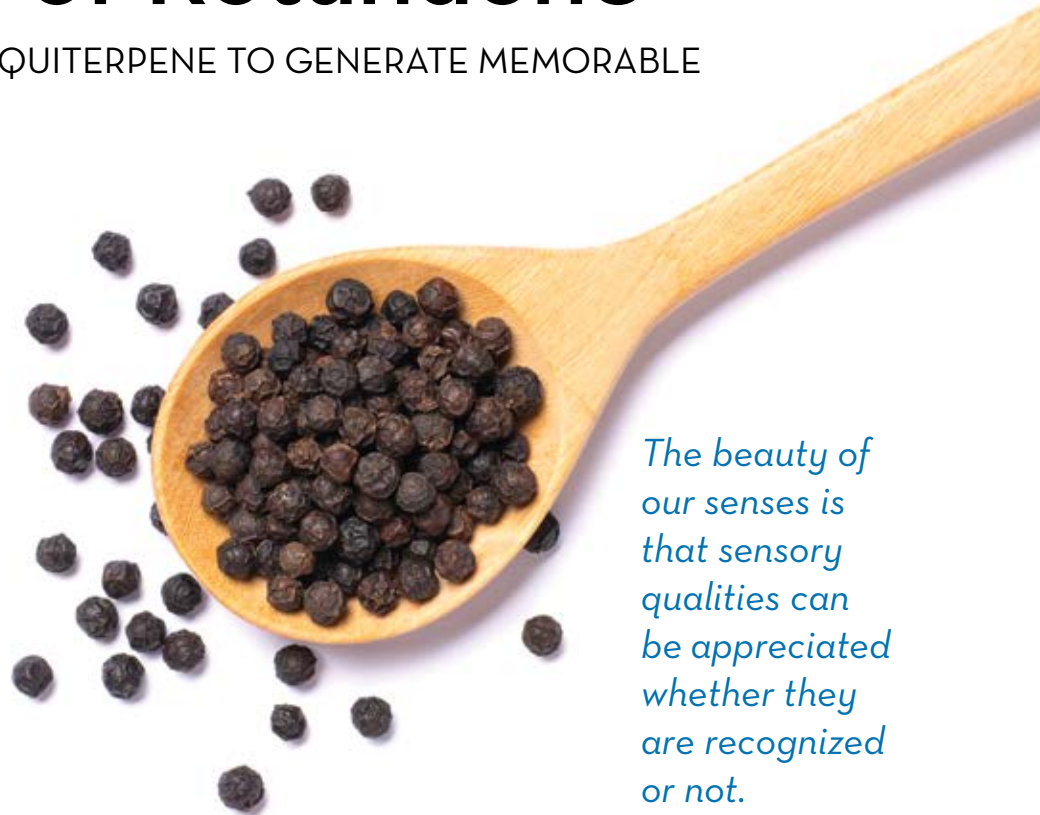
based red wine I bottled under my eponymous brand. My objective was to produce Cabernet Sauvignon that was sleek, crisp, and light enough to complement Asian or fusion foods. Yet it wasn't enough, I quickly discovered, for a wine to be sleek, crisp, and light.

Since human perception is syncretic—that is, the brain gathers sensory information via receptors channeled through the nose as well as the palate—my wines needed an aromatic synergy to meet the culinary goals I had for them. Luckily, around that time, I discovered newly planted Syrah in the lower foothills of Lodi, California, that possessed strong peppery attributes. When blended into the Cabernet, voilà, it produced red wine that was light yet peppery enough to strike a stunning chord with Asian-influenced dishes such as Thai shrimp with Sichuan peppers, furikake salmon, and wok steak with shishito peppers.

I have since discovered that rotundone

can make a surprising partner for dishes rich in umami. Not too long ago, I gathered six sommeliers around a table and served them a classic California Chardonnay and Petite Sirah with a creamy dish consisting of macaroni, aged cheeses, lobster, and cayenne pepper. Counterintuitively, every one of these restaurant professionals preferred the Petite Sirah, not only because the lobster and cheeses offered an umami-driven flavor bridge to the red wine but also because of the interaction of the hot spice with the wine's intrinsic peppery note.

Most guests do not walk into restaurant doors expecting exotic sensory experiences, but they know good things when they taste them. Just as a chef combines distinct ingredients into coherent dishes, a clever sommelier utilizes sensory components in wines to bring together the various elements of a menu to create a cohesive experience. In this endeavor, rotundone can be their friend. 



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