

OLFACTION

by Frank Deis

Because there are only five "flavors" that the tongue can sense, much of the enjoyment of wine obviously has to come from the sense of smell. The tongue can taste sweet, sour, salty, bitter, and "umami" which is a taste of cooked mushrooms, cooked meat, or soy sauce. There are hundreds of different smell receptors in the lining of the nose, and these stimulate different parts of the brain providing a very wide array of olfactory experience. On a biochemical level, we know that the receptors are seven-helix transmembrane proteins coupled to G-proteins inside the cell. This may sound confusing but the same mechanism is used in vision, and in certain of the taste sensors (bitter, sweet, and umami).

When you read a well written wine tasting note, you can actually visualize the wine, and imagine what it would be like to taste it. It's not enough to say "this is real good" or "it tastes elegant." You have to use terms that describe what you are experiencing. For example, certain wines have an element of grapefruit in the bouquet – Cloudy Bay Sauvignon Blanc from New Zealand for example. Other wines smell like tangerine – several white wines from the Rheinpfalz area of southern Germany have this characteristic. It can be difficult to analyze, literally "take apart" the sensations you experience when tasting a wine. And for most of us, it's not necessary to work all that hard just to enjoy the wine. But if you want to discuss the wine, you need to make some effort in this direction.

It is particularly useful to practice identifying odors in "doctored" wine. This way you can confirm that you are actually smelling "pears" or "apples" when you think you are. Even though wines are made of grapes, other flavor elements are produced during fermentation and aging, and these can often be described in terms of other fruits. Many Italian red wines smell of cherries or black-currants. Some wines from southern Italy smell of prunes. Old Bordeaux and cabernet can have a "tobacco-leather" scent as well as the aroma of coffee. Red wines from the Rhône even have "grilled meat" or "bacon" elements in their bouquet. Unripe cabernet can smell like green bell peppers. If you buy an issue of a wine magazine, and read through it, you will see many descriptions of this type.

Dr. Anne C. Noble of the University of California at Davis has done a lot to promote accurate description of wines. Her "Wine Aroma Wheel" attempts to classify all of the bouquets found in red and white wines, and she recommends training for tasters to start using proper terminology to discuss wine. You can read about her work here:

<http://wineserver.ucdavis.edu/Acnoble/waw.html>

<http://slate.msn.com/?id=73250>