

What are Clones?

In visiting tasting rooms you have no doubt heard the word “clones” many times in conversations about Pinot noir wine.

So what is a clone?

Most of us think of a grape variety as one type of grape that is consistent from vine to vine. In reality, each type of grape variety has many different “clones” that were all derived from the same type of grape vine. A clone is simply a new grapevine replicated from a known “mother” vine by taking a cutting from the “mother” vine. Virtually all grapevines are created this way, from cuttings rather than from seeds, so that the progeny are identical to the parents, going all the way back to the “mother” vine.

Pinot noir appears to be genetically unstable and new clones, resulting from “point mutations” of this variety, have been selected by growers who were attracted to their unique fruit color or shoot growth. In Pinot noir vineyards, it is not uncommon to find one or more vines with a single shoot that has characteristics quite unlike the others on the same plant. Depending on the type of mutation that has occurred, these characteristics may or may not be maintained when buds from the shoot are used to propagate new vines. However, if all buds on the new vines display the same attributes that were present on the original shoot, then a new clone or variety is born. Both Pinot blanc and Pinot gris are descendants of Pinot noir. Each differs from its parent in various ways, most notably in fruit color. See photo.



Pinot noir, Pinot gris and Pinot blanc

There are more clones of Pinot noir than of any other wine grape variety, and, not surprisingly, most are from France. The University of California Davis Foundation Plant Service (FPS) was created to provide virus tested plant materials for research and commercial use. At present nearly 100 Pinot noir selections have been submitted to UC Davis for inclusion in the registration program, including French clones and heritage California selections. The most authentic Dijon clones are available include 115, 165, 236,375, 459, 667, 743, 777, and 943. There are also Dijon clones of varied source and disease status in the trade. About a dozen of the available Pinot noir clones are planted in Oregon.

Since clones can taste very different from one another, they are of great importance to both the grower and the winemaker. Individual clones of Pinot noir are prized for particular attributes, such as crop size, specific aromas or tannins, time of ripening, low or high sugars or acidity and sensibility to disease. Therefore most growers plant a mixture of clones, which can help give

wine more complex flavors – another example of how the winemaking process starts in the vineyard.

Grapevines most often aren't grown on their own roots but are grafted onto different rootstocks. The Great French Wine Blight in the mid-19th century destroyed most of the vineyards in France and laid to waste the wine industry. This was caused by an aphid (phylloxera) that originated in North America and was carried across the Atlantic in the late 1850s. While France is considered to have been worst affected, the blight also did a great deal of damage to vineyards in other European countries. Most vineyards in California and Oregon were first planted on their own rootstock until the 1990s when phylloxera became a problem. Now all new vines are grafted onto phylloxera-resistant American rootstock.

The VIDON Pinot noir vineyard was planted in August 2000 and April of 2001. The soil is deep Jory with a southwest slope making it a very warm site. After much tasting and consultation with local winemakers, Pommard along with Dijon 115 and 777 Pinot noir clones were chosen and grafted onto rootstock Riparia Gloire. This rootstock was chosen because it is early ripening and therefore harvest labor is more readily available. In addition, harvesting before the rains in 2007 and 2013 vintages avoided the problems encountered by many vineyards. And we have never had to net our vines to protect them from birds because harvest is before the major migrations.