

## BRUCE NEYERS SHARES HIS PERSPECTIVE ON NATIVE YEAST FERMENTATION

## AN OLD WORLD PROCESS AT NEYERS VINEYARDS

Vineyards are loaded with airborne micro-organisms. Microscopic sugar fermenting yeasts are one of the many life forms native to vineyards. During the final stages of the growing season, individual grapes secrete a waxy substance on their skin as they ripen. The substance, called 'bloom', traps these micro-organisms. For years, wine schools taught students that the organisms in this 'bloom' would introduce contaminants to wine. To protect against this invasion, labs developed pure, single-strain yeasts, and supplied them to wineries. These reduced the risk of contamination from so-called 'wild, native yeasts'. Winemakers were taught to destroy the natural forms of life that were on freshly picked grapes at harvest with the addition of Sulfur-Dioxide (SO2) gas. While this addition of SO<sub>2</sub> killed the native yeasts on the surface of the grape, it also destroyed other beneficial organisms. A more controlled fermentation could then be initiated with the addition of a massive dose of lab developed yeast. Over the years, these yeasts have been grown for individual characteristics, such as vigor, aromatics, or alcohol tolerance. Along with that they reduced the risk of contamination. Some winemakers believed that these lab yeasts simplified wines, dumbed them down so to speak, and eliminated characteristics that made wine more interesting.

We now ferment 100% of our wines at Neyers using native wild yeasts. We encourage each cluster to develop its unique micro-organism profile during ripening. We add neither SO<sub>2</sub> nor cultured yeast at harvest. There are several yeast types present, and we know that each introduces differences to the biochemical process. One ferments only at low alcohol levels. Another creates a specific aromatic constituent. A third only functions at high nutrient levels, slowing down the process. Each makes a unique contribution. After fermentation, we return the skins, seeds, stems and lees to the vineyard, stabilizing the micro-organism population.

The process requires regular monitoring of the fermenting must, but has a positive impact on the wine in several ways. Because native yeast fermentations are less vigorous, the process lasts longer. While it ties up fermentation capacity, the slower fermentation allows for the formation of higher molecular weight alcohols like Glycerol, which add richness and body, as well as an attractive suggestion of sweetness. It generates more byproducts, increasing the complexity of the wine. Hydrogen Sulfide ( $H_2S$ ), an objectionable compound in large amounts, provides a desirable aroma similar to hazelnut in small quantities. The French call it 'noisette' and value it. The use of native yeast in winemaking is part of the attractive category that we call 'natural wine'. Producing it will always require strict attention to detail and greater risk.

Bruce Neyers March 30, 2020 Neyers Vineyards



Neyers Conn Valley Vineyard



Winery Doors of Neyers Vineyards



All Neyers wines are fermented with native yeast, including the Carneros Chardonnay.