Scheme illustrating Noblesse actions in rebalancing a wine from its sulfur like off-flavors
Legend for the following schemes

- **Ethanthiol**: symbolizing the sulfur compounds participating to the sulfur like off-flavors.

- **Isoamyl-acetate**: symbolizing the esters and other compounds enhancing the sulfur like off-flavors.

- **Methoxy-pyrazin**: symbolizing the herbaceous compounds enhancing the sulfur like off-flavors.

Dominique Delteil Consultant document.
Professional use not allowed (training, copy, publication, commercial document, etc.) without written D. Delteil’s authorization.
Legend for the following schemes

Mercapto-hexanol: symbolizing the sulfur compounds participating to the fruity flavors. In gray color: not expressing because covered by negative impacting compounds.

β-damascenone: symbolizing the varietal compounds participating to the fruity flavors. In gray color: not expressing because covered by negative impacting compounds.
Legend for the following schemes

Mercapto-hexanol: symbolizing the sulfur compounds participating to the fruity flavors. In full colors: expressing because in positive interaction with yeast mannoproteins

β-damascenone: symbolizing the varietal compounds participating to the fruity flavors. In full colors: expressing because in positive interaction with yeast mannoproteins
Noblesse® in action: adsorption

Before

Comments: sulfur like off-flavors are dominant because they are:
- in too high concentration
- not enough interacting with macromolecules
- sensorially enhanced by some esters and other compounds themselves not well integrated in the wine colloidal matrix
Noblesse® in action: adsorption

Comments: compounds not well integrated in the colloidal wine matrix are able to be adsorbed on Noblesse cell surface.
Note: 20 g/hl Noblesse are 1 billion/liter small sponges representing about 1 m²/liter of exchanging mannoprotein and glucane complexes.

Noblesse cells

Photo: Lallemand

Dominique Delteil Consultant document.
Professional use not allowed (training, copy, publication, commercial document, etc.) without written D. Delteil’s authorization.
Noblesse® in action: adsorption

Comments: once adsorbed on the cell surface, a part of the sulfur compounds and their enhancing compounds are removed from the wine. The compounds participating to fruity flavors will express better, not being sensorially covered anymore.
Noblesse® in action on the colloidal matrix

Before

Comments: sulfur like off-flavors are dominant because they are:
- in too high concentration
- not enough interacting with macromolecules
- sensorially enhanced by some esters and other compounds themselves not well integrated in the wine colloidal matrix

Dominique Delteil Consultant document.
Professional use not allowed (training, copy, publication, commercial document, etc.) without written D. Delteil’s authorization
Noblesse® in action on the colloidal matrix

During

Comments:
macromolecules released by Noblesse enter in interactions with volatile compounds that were not well integrated in the wine colloidal matrix and were not adsorbed on Noblesse cells.

Noblesse colloids
Noblesse® in action on the colloidal matrix

During

Comments: Those interactions change their volatility. As a consequence it diminishes the aggressive perception of sulfur compounds and molecules enhancing their expression, on the nose and the mouth.

Noblesse colloids

Dominique Delteil Consultant document.
Professional use not allowed (training, copy, publication, commercial document, etc.) without written D. Delteil’s authorization
Noblesse® in action on the colloidal matrix

After

Comments: Those interactions change their volatility. As a consequence it enhances the ripe fruity expression of fruit impacting molecules

Noblesse colloids

Dominique Delteil Consultant document.
Professional use not allowed (training, copy, publication, commercial document, etc.) without written D. Delteil’s authorization
Noblesse® in action on the colloidal matrix

After

Comments: Diminishing the aggressivity of sulfur compounds and enhancing the fruity perception of certain thiols and varietal compounds, those interaction develop the fruity perception of the wine. The colloidal matrix is upgraded for its concentration and it is stabilized giving a better longevity

Noblesse colloids