# Stimula™
## Sauvignon blanc

### Optimal thiol production in Sauvignon blanc.

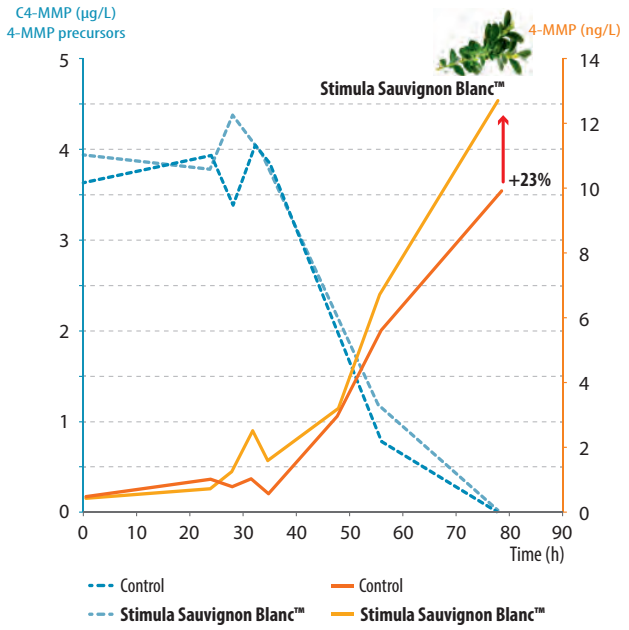
## ORIGIN AND APPLICATION


***Stimula***™ is a new range of 100% yeast autolysate products formulated to supply the optimal levels of amino acids, sterols, vitamins and minerals known to optimize the aromatic yeast metabolism.

***Stimula Sauvignon blanc***™ is particularly rich in panthotenate, thiamin, folic acid and zinc and manganese in order to optimize the uptake of 4-MMP and 3-MH precursors and their bioconversion to volatile thiols.

Together with our knowledge of yeast metabolism and with recent results from our research partners, we have defined the optimal moment to add ***Stimula Sauvignon Blanc***™. As the uptake of thiol precursors occurs in the very early stage of fermentation, the addition of ***Stimula Sauvignon Blanc***™ at the very beginning of the fermentation will enhance the optimal elements to be taken up by the yeast and their bioconversion to volatile thiols, avoiding any repression and increasing the transporter's efficiency.

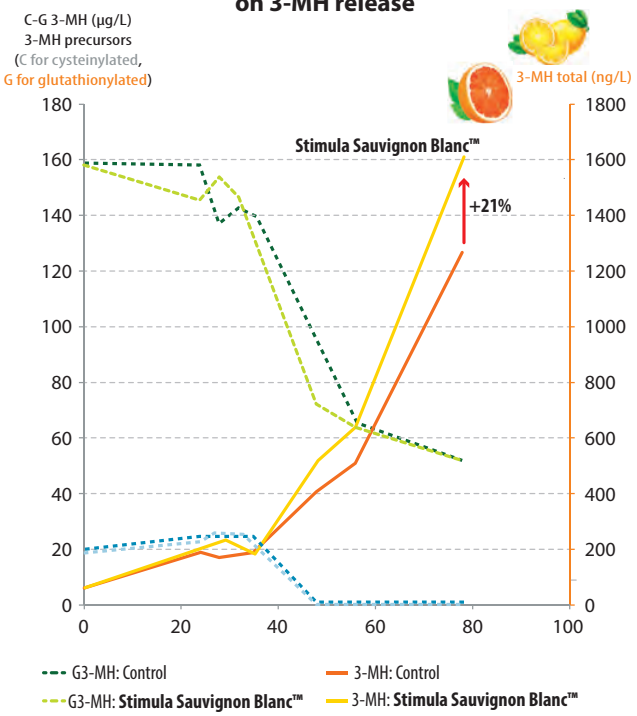
**From precursors to volatile thiols: the impact of *Stimula Sauvignon Blanc*™ on 4-MMP release**




**4-MMP yeast A conversion yield / control : 2,5**
**With Stimula Sauvignon blanc™: 3,25**

Trial on a Sauvignon blanc wine 2015 (Loire, France) DAP vs ***Stimula Sauvignon Blanc***™ added at 40 g/hL at the beginning of alcoholic fermentation. Dotted curves represent the uptake of the 4MMP precursors and solid curves the release of 4MMP.

**From precursors to volatile thiols: the impact of *Stimula Sauvignon Blanc*™ on 3-MH release**




**3-MH yeast A conversion yield**
**control : 10,5**
**With Stimula Sauvignon Blanc™: 13,3**

Trial on a Sauvignon blanc wine 2015 (Loire, France) vs ***Stimula Sauvignon Blanc***™ added at 40 g/hL at the beginning of alcoholic fermentation. Dotted curves represent the uptake of the 3MH precursors (cysteinylated in blue and glutathionylated in green) and solid curves the release of 3MH.

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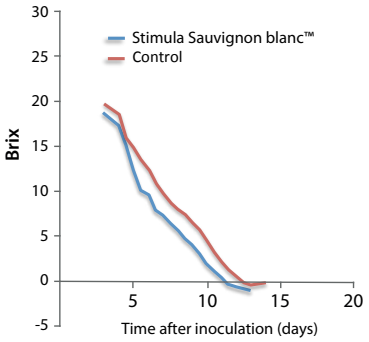
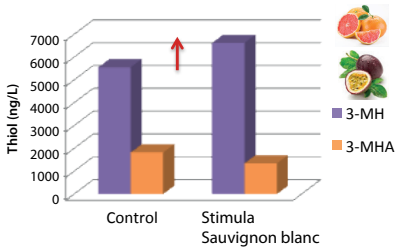
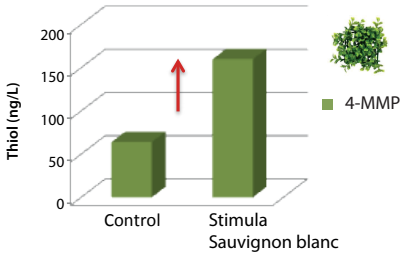
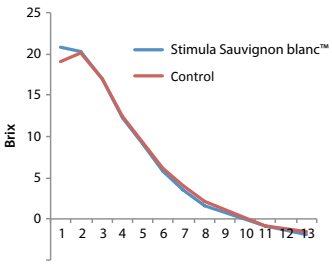


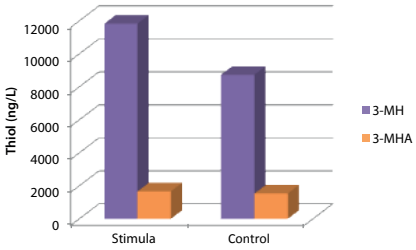




19.8 Brix, pH 3.2, TA 9.6 g/L, F/T SO2 10/22 mg/L

Trial on Sauvignon blanc (Marlborough, New Zealand, 2017) with ***Stimula Sauvignon blanc™*** addition (40 g/hL) at the beginning of alcoholic fermentation. Efficient fermentation kinetics and a significant increased release of 3-MH and 4-MMP thiols.




18 Brix, pH 3.29, TA 9.75 g/L, F/T SO2 6/35 mg/L
Yeast: Revelation Thiols

Trial on Sauvignon blanc (Marlborough, New Zealand, 2017) with ***Stimula Sauvignon blanc™*** addition (40 g/hL) at the beginning of alcoholic fermentation. Efficient fermentation kinetics and a significant increased release of thiols.

| Must YAN | Start of AF | 1/3rd way thru AF |
|---|---|---|
| >200mg/L | Stimula Sauvignon™ – 40 g/hL | |
| 125-200 mg/L | Stimula Sauvignon™ – 40 g/hL | Fermaid O/Fermaid AT – 10-20 g/hL |
| <125 mg/L | Stimula Sauvignon™ – 40 g/hL | Fermaid O/Fermaid AT – 20-30 g/hL |

YAN : Yeast Assimilable Nitrogen

## INSTRUCTIONS FOR USE

- ***Stimula Sauvignon Blanc™*** is a nutrient supplying highly available amino-acids, peptides, vitamins and minerals.
- Recommended dosage is 40 g/hL (400 ppm) added at the beginning of AF.
- ***Stimula Sauvignon Blanc™*** should be suspended with water (1 kg ***Stimula Sauvignon Blanc™*** in 10 L water) and added immediately to the tank. If prepared in advance, re-suspend the product prior to its addition to the fermenter.

### PACKAGING AND STORAGE

- 10 kg (10 x 1 kg boxes) in 10 kg box.
- Store in a dry environment below 25°C.
- Shelf-life at the recommended storage temperature is 4 years from production time.

*The information herein is true and accurate to the best of our knowledge; however, this data sheet is not to be considered as a guarantee, expressed or implied, or as a condition of sale of this product.*

Ver 3.0 / 03.2019

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