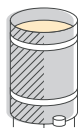
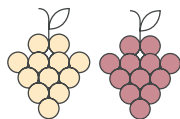


FOCUS // LAFAZYM® THIOLS^[+] & LAFAZYM® AROM BRING OUT AROMAS

MECHANISMS FOR BIOTRANSFORMATION OF THIOL PRECURSORS BY YEAST



Red and white grape varieties*

Family of glutathionylated thiol precursors.

Must

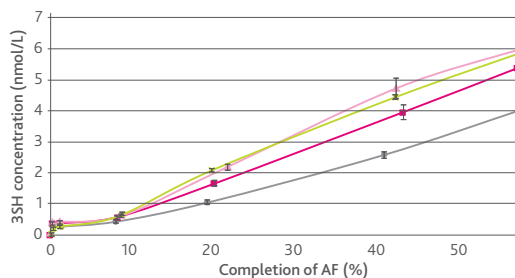
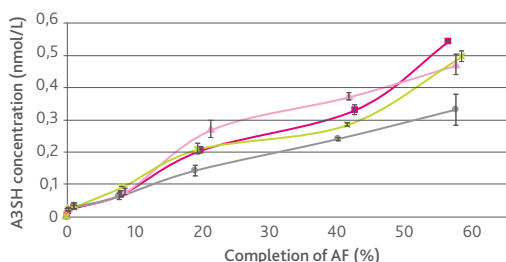
Enzymatic hydrolysis of intermediate precursors.

Alcoholic fermentation (*Saccharomyces cerevisiae*)

Biotransformation of intermediate precursors into volatile thiols.

* Present in many red and white grape varieties: Sauvignon blanc, Colombard, Petit Manseng, Sémillon, Muscadet, Pinot Gris, Pinot Blanc, Melon Bourgogne, Macabeo, Syrah, Malbec, Pinot Noir, Grenache, Gewürztraminer, Cabernet Sauvignon, Chardonnay, Negrette, Verdejo, Merlot (red & rosé), Chenin Muscat.
Tominaga et al., 2000; Murat et al., 2001; Blanchard et al., 2004; Sarrazin et al., 2007.

INCREASING THE BIOTRANSFORMATION OF VOLATILE THIOLS (3SH AND A3SH) THROUGH THE ADDITION OF ENZYME PREPARATIONS



A. Minot 2016
BIOLAFFORT

Enzyme preparations at 5 g/hL compared with a control with no enzyme addition - A3SH : Passion fruit - 3SH : Grapefruit

→ How to optimise the biotransformation of thiols during alcoholic fermentation?

- By using a yeast with the ability to release and convert volatile thiols: ZYMAFLORE® X5, DELTA et VL3.
- By adding an enzyme preparation capable of promoting release of thiols by the yeast LAFAZYM® THIOL^[+].

PRE-FERMENTATION AND FERMENTATION PHASES

LAFAZYM® THIOL^[+] P

Specific for bringing out aromas in grape varieties with volatile thiol characters.

- Micro-granulated preparation of pectolytic enzymes with secondary activities.
- Acts in synergy with yeasts to bring out volatile thiols.
- Can be used on juice and added up to the first third of the alcoholic fermentation, to increase the aromatic potential of wines.

Dose : 3 - 6 g/hL.

AGEING PHASE

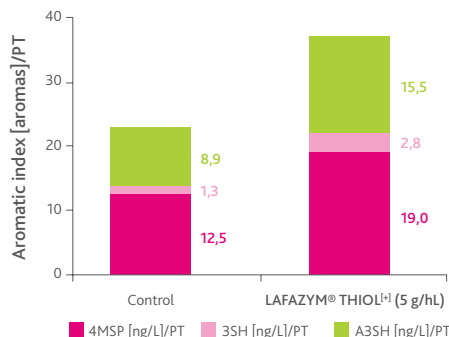
LAFAZYM® AROM P

Specific to aromatic wines made from grape varieties such as Muscat, Riesling, Gewürztraminer, Chenin, Grenache, Syrah...

- Micro-granulated preparation of pectolytic and β -glucosidase enzymes.
- Increases the aromatic intensity of wines made from grape varieties with glycosylated terpene and norisoprenoid precursors.

Dose : 2 - 4 g/hL.

Increase in the aromatic potential (Thiols) of a wine.



Experimental cellar trial - Sauvignon Blanc
4MSP : Boxwood - PT: perception threshold