

TECH POINT

PRE-BOTTLING: THE FINISHING TOUCH

MANNOPROTEINS AS THE ULTIMATE TOOL

ORIGIN AND BENEFITS OF MANNOPROTEINS

Yeast is not merely an agent of alcoholic fermentation. Several processes are used in winemaking to break it down to a greater or lesser extent and make the best possible use of **the many compounds of interest that it contains**. The yeast derivatives thus obtained vary in composition, making it possible to adapt their use to the needs of the wine at different stages in its production. The polysaccharides contained in its cell walls are macromolecules which, due to their strong reactivity with other wine compounds (aromatic compounds, polyphenols), contribute to **sensations of roundness and volume**. This is because they limit the reactivity of polyphenols with salivary proteins, thus **reducing the perception of astringency** (Figure 1)

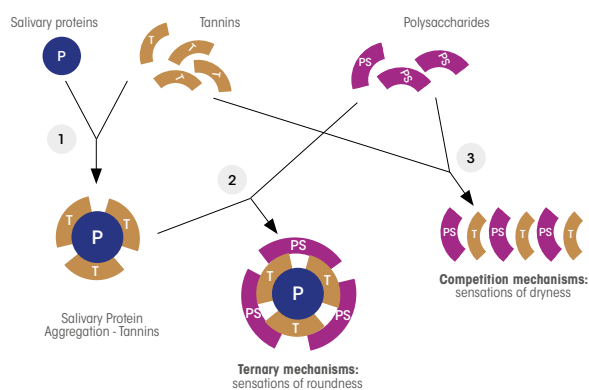


Figure 1. Possible mechanisms of action of polysaccharides on taste properties: (2) Ternary mechanisms and (3) Competition mechanisms involved in the inhibition of the aggregation of tannins and salivary proteins by polysaccharides.

Mannoproteins, a fraction of these polysaccharides that make up 25 to 50% of the composition of the cell walls of *Saccharomyces cerevisiae*, are known to **contribute to tartrate, protein and colloidal stabilization, activate the growth of lactic acid bacteria and enhance the organoleptic characteristics of wines** (aromas, taste properties, perception of effervescence, etc.).

Yeast derivatives are also **rich in reducing components that enhance the intensity of aromas and protect them against oxidation**, thus guaranteeing their longevity.

THE VALUE OF SELECTING MANNOPROTEINS

Mannoproteins are made up of a mannose polysaccharide framework (70-90%), a protein framework (10-20%), and 10% glucose. This **extremely diverse composition and molecular organization** explains their **multiple properties** and the various applications they can have. This also means that **the choice of yeast strains used is key** to the quantity and nature of the mannoproteins released.

THE FINISHING TOUCH

MANNOPROTEINS AS THE ULTIMATE TOOL

Phylia® Içône

A pre-bottling tool ideal for **rounding out wines** and **unlocking their full potential**. PHYLIA® ICÔNE reveals the elegance of wines of every colour.

Protein, tartrate and colloidal stability



100% natural

Optimum organoleptic profile







A preparation of purified mannoproteins from *S. cerevisiae*



TO PUT THE FINISHING TOUCH TO WINES BEFORE BOTTLING

EFFECTS OF PHYLIA® ICÔNE

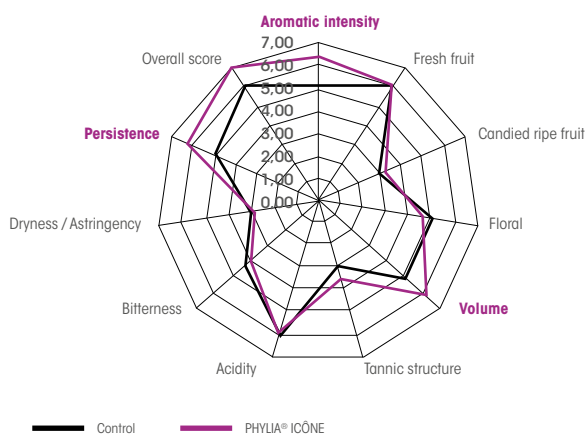
MANNOPROTEINS

-  **Provides** volume and roundness in the mouth.
-  **Reduces** the astringency and hardness of tannins.
-  **Decreases** perception of acidity.
-  **Helps to** stabilize protein cloudiness and tartrate and colour precipitation.

The yeast strain from which the mannoproteins underlying the formulation of PHYLIA® ICÔNE are derived was specially selected to guarantee these properties.

OENOLOGICAL PROPERTIES

SENSORY ANALYSIS - TASTING OF A VIOGNIER



PHYLIA® ICÔNE helps to enhance the persistence and aromatic intensity of wines as well as their freshness.

APPLICATION ON WINES

Time of application: to be added to the wine just before bottling

Dosage: 0.5 to 5 g/hL

Preparation: rehydrate the product in 10 times its weight in water then thoroughly mix before adding to the tank during pumpover.



Consult our oenologists to obtain a personalized protocol