

Tecniche enologiche

Rifermentazione nel metodo charmat e gestione del piede

Analisi enologiche

Descrivere una metodica per la determinazione dell'acido malico in enologia

Analisi molecolari e microbiologiche

Descrivere le condizioni di crescita per la quantificazione di un batterio acetico


Statistica


Descrivere il concetto di significatività statistica

Prova inglese

(Marsit S, Dequin S. Diversity and adaptive evolution of *Saccharomyces* wine yeast: a review. *FEMS Yeast Res.* 2015;15(7):fov067. doi:10.1093/femsyr/fov067)

The primary constituents of grapes must include sugars (glucose and fructose in equimolar amounts, present in high concentrations, 180–300 g L⁻¹), organic acids (tartaric and malic), mineral cations (especially potassium), nitrogen compounds and lipids (phytosterols). As yeasts preferably metabolize glucose rather than fructose, fructose is the major sugar present during the late stages of wine fermentation. Wine yeasts must ferment this non-preferred sugar after long periods of starvation and in the presence of large amounts of ethanol.


More Vega


Ester C

Tecniche enologiche

La definizione di fermentazione malolattica e l'uso in enologia

Analisi enologiche

Descrivere una metodica per la determinazione dell'etanolo in enologia

Analisi molecolari e microbiologiche

Descrivere una metodica per l'estrazione degli acidi nucleici da microrganismi.

Statistica

Descrivere il significato di curva gaussiana

Prova inglese

(Kontoudakis, N., et al. "Use of unripe grapes harvested during cluster thinning as a method for reducing alcohol content and pH of wine." *Australian Journal of Grape and Wine Research* 17.2 (2011): 230-238.)

Alcoholic fermentation was carried out at 18 °C. When finished, the tank was sulphited with 100 mg of K₂S₂O₅/L and treated with 5 g/L of charcoal and 1 g/L of bentonite to obtain absolute decolouration and deodorisation. This low ethanol wine presented the following analytical parameters: 5% (v/v) of ethanol, a titratable acidity of 17.8 g tartaric acid/L and a pH of 2.64. Moreover, the spectrophotometric analysis of this low-ethanol wine showed that absorbance at 420 was 0.023. This value is low and below typical values for white wine, thereby confirming the efficacy of the fining treatment for eliminating phenolic compounds.

Mary
Maria Vero

pH
Eleonora

Tecniche enologiche

Rifermentazione nel metodo classico e autolisi dei lieviti

Analisi enologiche

Descrivere una metodica per la determinazione dell'anidride solforosa in enologia

Analisi molecolari e microbiologiche

Descrivere le condizioni di crescita per la quantificazione un batterio della fermentazione malolattica

Statistica

Definire l'errore sistematico ed accidentale

Prova inglese

(Marsit S, Dequin S. Diversity and adaptive evolution of *Saccharomyces* wine yeast: a review. *FEMS Yeast Res.* 2015;15(7):fov067. doi:10.1093/femsyr/fov067)

The most desirable traits of wine yeasts include the rapid and complete degradation of sugars into ethanol and CO₂ to provide metabolites and aroma compounds that positively impact the sensory balance of wine, without producing undesirable compounds. Vineyard environment is of crucial importance, as, due to the presence of the grape microbiota, can be considered a genetic reservoir of yeasts possessing both traditional and innovative technological characters.


Maria V. P.


P. P.

Tecniche enologiche

L'uso dei solfiti in enologia

Analisi enologiche

Descrivere una metodica per la determinazione degli zuccheri in enologia

Analisi molecolari e microbiologiche

Metodi per la determinazione della concentrazione dei lieviti durante il processo fermentativo

Statistica

Descrivere il concetto di replica nell'analisi statistica

Prova inglese

(Marsit S, Dequin S. Diversity and adaptive evolution of *Saccharomyces* wine yeast: a review. *FEMS Yeast Res.* 2015;15(7):fov067. doi:10.1093/femsyr/fov067)

Wine fermentation is a fluctuating environment that exposes yeast to a variety of stresses, including high osmolarity, reflecting increased sugar concentrations, high sulfite levels, anaerobiosis, acid stress, nutrient (nitrogen, lipids and vitamins) depletion and ethanol toxicity. A typical wine fermentation comprises a lag phase, which lasts for several hours, a short growth phase of 24–36 h, followed by a stationary phase, during which most of the sugar (between 50 and 80%) is fermented.

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Marsit S
Dequin S

Tecniche enologiche

Differenze tra fermentazione spontanea e fermentazione guidata

Analisi enologiche

Descrivere una metodica per la determinazione dell'APA in enologia

Analisi molecolari e microbiologiche

Utilizzo della PCR (polymerase chain reaction) per l'identificazione dei lieviti enologici

Statistica

Descrivere il significato di curva gaussiana

Prova inglese

Varela, Cristian, Francisco Pizarro, and Eduardo Agosin. "Biomass content governs fermentation rate in nitrogen-deficient wine musts." *Appl. Environ. Microbiol.* 70.6 (2004): 3392-3400.

Sluggish and stuck fermentations are common in the wine industry. Factors that affect the yeast growth rate and that lead to problematic fermentations include limited nutrient contents, ethanol toxicity, fatty acid toxicity, temperature extremes, the ratio of nitrogen sources to carbon sources in the medium and the initial quantity and quality of the aminoacids. In stuck fermentations, high levels of residual sugar are left following the arrest of fermentation. Several difficulties occur at the cellular level.

