

---

## **SACCHAROMYCES EUBAYANUS POTENTIAL IN WINEMAKING FIELD**

Francesca Patrignani<sup>1</sup>, Giuseppina P. Parpinello<sup>1</sup>, Arianna Ricci<sup>1</sup>, Vincenzo Castellone<sup>1</sup>, Samantha Rossi<sup>1</sup>, [Rosalba Lanciotti](mailto:rosalba.lanciotti@unibo.it)<sup>1</sup>.

<sup>1</sup>University of Bologna, Department of Agricultural and Food Sciences, Italy.

Presenting author: [rosalba.lanciotti@unibo.it](mailto:rosalba.lanciotti@unibo.it)

Abstract ID: 163

Type: Oral

The literature data have pointed out the growing interest for the species *Saccharomyces eubayanus*, a recently described taxon, isolated from natural environments in Patagonia and discovered to be the unknown part, together with *S. cerevisiae*, of *S. pastorianus*, an allopolyploid hybrid used for lager beer production. Although up to now, *S. eubayanus* was associated with *Nothofagus* trees and some traditional fermented beverage in Patagonia, it is believed to have a great potential also in oenological sector. For this, principal aim of this research was to investigate the potential of *S. eubayanus* CBS 12357 for fermenting Chardonnay musts at 10, 16 and 26°C. Its technological potential was compared to that of *S. cerevisiae* VIN13, a commercial strain typically used for this purpose. For both the strains, the fermentation kinetics and the yeast cell loads, in relation to the adopted temperature, were monitored. The obtained wines were also characterized for oenological parameters and the volatile molecule profiles by

GC/MS/SPME. Moreover, also panel tests were performed. The data obtained pointed out the great cryotolerant aptitude of *S. eubayanus* which resulted, at 10 and 16°C, in faster fermentations with respect to *S. cerevisiae* VIN 13. Also, *S. eubayanus* gave rise to wines characterized by specific volatile molecule fingerprinting. According to the panel test performed, the wine obtained by *S. eubayanus* resulted not statistically different from those from *S. cerevisiae* but they were characterized by “body” and aroma persistence, highlighting as proper winemaking processes can be useful to exploit the *S. eubayanus* potential in winemaking.

---