

**Año: 2023**

**Título artículo:** Distinctive Role of Yeast Strain on Aromatic Profile of Wines Made from Minority Grape Cultivars: Chemical and Sensory Characterization of Aroma Components

**Capítulo 4 del libro** *New Advances in Saccharomyces* editado por IntechOpen.

<http://dx.doi.org/10.5772/intechopen.1003666>

**Autores:** José Pérez-Navarro, Adela Mena-Morales, Sergio Gómez-Alonso, Esteban García-Romero and Pedro Miguel Izquierdo-Cañas

#### RESUMEN:

This chapter synthesizes the main results that our research group has obtained about the specific influence of a commercial *Saccharomyces cerevisiae* strain on the aromatic profile of fermented musts from four minority grape varieties (*Vitis vinifera* L.) cultivated in Castilla-La Mancha (Spain), that is, Moribel, Tinto Fragoso, Albillo Dorado and Montonera del Casar. In addition, wines made from the grape cultivars Tempranillo and Airén were evaluated. To determine the main yeast-derived odor relevant in these grape varieties, the aromatic profiles of grape cultivars and the resulting wines were studied by gas chromatography coupled to mass spectrometry and wines were subjected to Napping, a rapid sensory evaluation method. The results revealed wine sensory differences which are consequence of different aromatic profiles of wines produced with these grape cultivars. The combination of quantitative chemical analysis of volatile compounds together with sensory analysis of wines point out different patterns of aroma compound formation and release. Thus, the yeast strain used in the fermentation step is one of the main factors that affect the sensory properties of wines.

#### AGRADECIMIENTOS:

This research was funded by the Castilla-La Mancha Regional Government (project POII-2014-008-P). J. P-N also thanks the European Union for financial support through the European Social Fund Plus (ESF+).