

MEMORIA



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través de la vitivinicultura”

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Summary

As the tartaric instability in the bottle still is a technical and commercial problem for winemakers, this paper investigated the possibility of forecasting the tartaric stability of wine using multivariate models created on the basis of infrared spectral information. More than 500 white, rosé and red wines - obtained without any addition of stabilizing agents - were analysed using Fourier Transform Infrared Spectroscopy, and their tartaric stability was assessed with the "mini-contact test" (10 min, 0°C, KHT) and the "cooling test" (5 days, -4°C), both used as well known and widespread reference methods.

Partial Least Squares-Regression and Artificial Neural Networks were applied on 80% of the samples to create predictive models which correctly classified (89 - 97%) the residual 20% of wines used as external validation subset. In the worst cases only 4-6% of unstable wines were erroneously classified as stable.

Keywords: wine, tartaric stability, FTIR, multivariate models, neural networks

ENO-41

The young sparkling wine aroma and its variability due to the yeast strain and the amount of assimilable nitrogen in the base-wine

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Summary

Six base wines (3 Mueller-Thurgau, 2 Prosecco, 1 Chardonnay), each at 2 levels of assimilable nitrogen, were fermented in the bottle with 6 yeast strains. The yeasts (SP665, DV10, Rhone 2056, FR95, BC, R2) were prepared as suggested by the Comité Interprofessionnel du Vin de Champagne. The sparkling wines were kept on the lees at 4-5°C. About 40 aroma compounds in free form were analysed by GC-FID two months after the end of second fermentation.

Second fermentation did not increased acetates of higher alcohols and ethyl esters of fatty acids responsible for fruitiness. When pied de cuve is well prepared, base wine assimilable nitrogen is a marginal factor as regards the fruity aroma compounds produced during second fermentation. The fruity aroma of sparkling and fizzy wines to be drunk young, greatly appreciated by the consumers, has to be already present in the base wine.

Keywords: yeast strain, yeast assimilable nitrogen, sparkling, fermentative aroma compounds

ENO-42

Modelamiento y control de un alambique charentais de destilación de vinos

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