Non-saccharomyces yeasts *Lachancea thermotolerans* and *Schizosaccharomyces pombe* applications in wine food microbiology: Influence in wine quality

The classical way to make red wine is based on the use of *Saccharomyces cerevisiae* yeasts during alcoholic fermentation and *Oenococcus oeni* bacteria during malolactic fermentation. This traditional winemaking methodology produces commercial stable red wines from a microbiological point of view. This work explains the use of a new red winemaking biotechnology that uses the combination of *Lachancea thermotolerans* and *Schizosaccharomyces pombe* yeasts as an alternative to the conventional alcoholic and malolactic fermentations. *Schizosaccharomyces pombe* consumes malic acid while *Lachancea thermotolerans* produces lactic acid to avoid an unnecessary deacidification in low acidic musts from warm viticulture areas such as the south of Spain. This methodology also reduces some malolactic fermentation hazards for human health such as biogenic amines and ethyl carbamate while it improves the colour and aroma profile.

Recent Publications


Biography

Santiago Benito has his expertise in Wine Microbiology. He is Vice Director of the Polytechnic University of Madrid Chemistry and Food Technology Department and Director of the Polytechnic University of Madrid Winery Center. He has written more than 40 indexed publications regarding the wine microbiology topic.