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Non-*Saccharomyces* yeasts *Lachancea thermotolerans* and *Schizosaccharomyces* pombe mixed cultures applications in wine food safety (biogenic amines and ethyl carbamate control) from high pH grape juice

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The classical way to make red wine is based on the use of *Sacharomyces cerevisiae yeasts* during alcoholic fermentation and *Oenococus oeni* bacteria during malolactic fermentation. This traditional winemaking methodology produces commercial stable red wines from a microbiological point of view. However, this methodology when applied in grape juices with high pH, like it is common in the south of Spain, can produce high levels of biogenic amines and ethyl carbamate that can seriously influence human health. 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 in order 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.

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