

## RISKS OF MICROBIAL SPOILAGE OF WINE: A REVIEW

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### Abstract

Wines are alcoholic drinks obtained from the fermentation of grapes. The main role of microorganisms in winemaking is to convert grape sugars to alcohol, reduce wine acidity and contribute to aroma and flavour. They can also cause numerous unwelcome wine spoilage problems, which reduce wine quality and value.

Winemaking processes include multiple stages at which microbial spoilage is likely to occur and ends up with altering the quality and hygienic status of the wine. This may render the wine unacceptable, since the spoilage can include bitterness and off-flavours, and cosmetic problems such as turbidity, viscosity, sediment and film formation. The main microorganisms associated with wine spoilage are yeasts, acetic acid bacteria and lactic acid bacteria.

A microbial spoilage is the consequence of inadequate working practices. These inadequate practices are derived from two principle attitudes: (1) non-application of known practices for well identified risks and (2) insufficient evaluation of risk levels.

One of the aims of winemaking is to minimize potential for microbial spoilage and in this review are presented risks of microbial spoilage of wine and their prevention.

**Key words:** *Winemaking, Microbial spoilage, Quality of the wine, Hygienic status of the wine, Prevention.*