

Editorial

# Microbiota of Fermented Beverages

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**Abstract:** This special issue collected recent developments on the microbiota of fermented beverages, from raw materials to the finished product, as well as the use of specific starter cultures. In particular, several studies investigated the occurrence and use of conventional and non-conventional yeasts in distilled alcoholic beverages, wine, and beer production, while other papers investigated probiotic and health-promoting compounds. Results indicated that the management of microbiota greatly improves the analytical, sensorial, and healthy characteristics of fermented beverages.

**Keywords:** fermented beverages; *Saccharomyces cerevisiae*; non-conventional yeasts; microbiota of raw materials; mixed fermentation

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The microbiota of fermented beverages is a complex microbial community made of indigenous microorganisms naturally associated with the raw materials and/or the microorganisms that are present on the equipment and surfaces of processing sites (man-made niches, i.e., wineries), where selected microorganisms may be inoculated as starter cultures.

Since the microbiota is responsible for the transformation of raw materials into the final product, it greatly influences the organoleptic characteristics and sensorial properties of the final product and may impact on the content of probiotics and health-promoting compounds of fermented beverages. Thus, the microbiota of fermented beverages produced in different regional habitats is a topic of increasing interest.

This special issue collected research papers and reviews about recent developments within this research topic. Several studies have investigated specific and peculiar features of non-conventional yeasts in winemaking and their interactions with *Saccharomyces cerevisiae*, the main actor of fermentation [1–5]. Other reports focus on the microbiota of specific ecological niches, such as sherry wines [6], malting and brewing environments [7], and banana wastes [8]. Selected indigenous *S. cerevisiae* strains coming from Piceno DOC wines were also investigated by Agarbati et al. [9], while Capece et al. [10] reviewed recent developments on the use of conventional and non-conventional yeast in beer production. Regarding the use of probiotic microorganisms, two papers reported the results of the use of *Lactobacillus ramosus* GR1 in fortified fruit juices and white rice pudding [11,12], while Ranadheera et al. [13] reviewed probiotic delivery through fermentation in dairy and non-dairy beverages. Finally, Guerrini et al. [14] investigated the production of health-promoting compounds in *S. cerevisiae* under winemaking conditions.

In general, all these authors conclude that by deepening the current knowledge on the microbiota of fermented beverages, it will be possible to greatly improve the management of the fermentation processes and of the analytical, sensorial, and healthy characteristics of final products. In this regard, further investigations are needed to optimize the different desired features in fermented beverages.

**Conflicts of Interest:** The authors declare no conflict of interest.

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