



Advances in volatiles from special beverages

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Fermentative processes are widely used by humankind for several proposals for centuries. At the same time, it provides a more stable food and, unequivocally, provides a wide variety sensory characteristic, which is mainly driven by the several aroma compounds produced along the process. Beverages produced by biotechnological processes are gaining more and more interest, as they are very pleasant for consumers due to their myriad of aroma compounds, which provides rich experiences to consumers. These unique characteristics of those beverages are intrinsically correlated by raw material and processes factors, resulting in a great variety of sensory characteristics (Berger, 2007).

In this way, *Volatile Compounds Formation in Special Beverages* covers the recent advances in beverages aroma biotechnology. It is structured in two sections, namely Distilled Beverages and Fermented Beverages. The first section covers Volatiles from cachaça, tequila and Whisky and the second section addresses volatiles from sparkling wine, cider, kefir, kombucha and dark tea.

Volatile Compounds Formation in Special Beverages starts with a comprehensive introduction about Fermented and distilled beverages, addressing also the main trends for alcoholic beverages production processes, focusing also on the cultures used for fermentation, as well as the main analytical tools for volatiles.

Distilled beverages section addresses the main classes of cachaça volatiles formation in chapter 2. Furthermore, chapter 3 approaches tequila volatiles production along the different steps of production, indicating the main steps and variables that could influence on the aroma characteristics of the final products.

Finally, chapter 4 ends the first section with an overview of the volatiles from Whisky, covering the process overview correlating the magnitude of different flavor characteristics provided by the several steps and factor that directly influence the beverage aroma compounds, from raw material to maturation.

Fermented beverages section covers sparkling wine in chapter 5, with focus on the fermentative compounds produced along the fermentation process, and also covering the process itself and downstream steps and correlation with the flavor quality of the beverage. Chapter 6 provides an overview about the correlation of different process aspects and the production of volatile compounds, from raw material to the final production steps. Kefir volatiles are addressed in chapter 7, which focus on the main volatile chemical classes, correlating with the particularities of the production process. Additionally, chapter 8 approaches the several possibilities for kombucha processes and its relation with flavor compounds production. The last section chapter covers the aroma and volatile compounds from dark tea.

Volatile Compounds Formation in Special Beverages provides an overview about aroma biotechnology focused on the main and most important beverages derived from fermentation and distillation processes in one single book.

References

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