

TAL 797 – Seminário

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Efect of non-Saccharomyces yeasts on the fermentation

characteristics and flavor profiles of beer.

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Beer is one of the oldest and most widely consumed alcoholic beverages in the world, present across various cultures and social contexts. It is traditionally produced through the fermentation of malted barley using yeasts from the *Saccharomyces* genus, and is primarily categorized into Ales, fermented at higher temperatures with top-fermenting yeasts (*S. cerevisiae*), and Lagers, fermented at lower temperatures with bottom-fermenting yeasts (*S. pastorianus*). The growth of the craft beer industry and the increasing demand for innovative products with unique sensory characteristics have driven research into the use of non-conventional yeasts. The application of non-*Saccharomyces* yeasts in beer production has gained attention for their ability to diversify flavor profiles and enhance aromatic complexity. While conventional *S. cerevisiae* strains remain the foundation of fermentation, alternative species such as *Hanseniaspora guilliermondii*, *Torulaspota delbrueckii*, and *Dekkera bruxellensis* have shown promising potential in modulating key compounds such as esters, higher alcohols, phenolic compounds, and organic acids, which contribute to fruity, floral, sour, and spicy flavor notes. Interest in mixed fermentations and co-inoculation strategies has grown as a means of creating new beer styles. In addition to expanding flavor complexity, the use of non-conventional yeasts presents sustainable and technological opportunities for the brewing industry, aiming to meet the expectations of consumers seeking both sensory novelty and functional benefits.

Referências bibliográficas:

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