

# Isolation and Performance Evaluation of Yeast (*Saccharomyces cerevisiae*) from Palm Wine During Proofing Bread †

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**Abstract:** Yeast, a one-celled organism commonly termed as unicellular and classified in the kingdom of fungus, is usually used by bakers to produce new products due to its leavening ability. In any baking process, yeast-mediated dough fermentation is very important for leavening. Palm wine gotten from palm trees by tapping is usually whitish and effervescent. The sap in its unfermented state is about 10-12% sucrose sugar; it is a clean, sweet, and colorless syrup. As there is a rise in the prices of commodities made internationally, it calls for improvement and affordable locally made substitutes. Yeast is one of man’s oldest and most commercially industrious microorganisms owing to its various utilization in the biotechnology industry. Its fermentation abilities are used in different industries, especially the food industry. Fermentation of bread is when yeasts convert sugars to carbon dioxide and alcohol in the absence of oxygen, causing the dough to rise. A proper fermentation leads to good flavor, smell, texture, and quality. New yeast strains can bring in knowledge about new flavors, textures, and quality that can be replaced with the previous one if satisfied by their efficiency. Therefore the main aim of this project is to study the characteristics and efficiency of new yeast strains, the interaction between the dough and yeast, and comparison of efficiency between commercially available yeast and newly developed yeast, thereby establishing useful information for future research about the functionality of new strains of yeast.

**Keywords:** yeast; palm wine; fermentation; bread.

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## Conflicts of Interest

The authors declare no conflict of interest.