

The Isolation and Performance Evaluation of Yeast (*Saccharomyces cerevisiae*) from Raffia Palm (*Raphia hookeri*) Wine Used at Different Concentrations for Proofing of Bread Dough

Authors : Elizabeth Chinyere Amadi

Abstract : Yeast (*sacchoromyces cerevisiae*) was isolated from the fermenting sap of raffia palm (*Raphia hookeri*) wine. Different concentrations of the yeast isolate were used to produce bread samples - B, C, D, E, F containing (2, 3, 4, 5, 6) g of yeast isolate respectively, other ingredients were kept constant. Sample A, containing 2g of commercial baker yeast served as control. The proof heights, weights, volumes and specific volume of the dough and bread samples were determined. The bread samples were also subjected to sensory evaluation using a 9-point hedonic scale. Results showed that proof height increased with increased concentration of the yeast isolate; that is direct proportion. Sample B with the least concentration of the yeast isolate had the least loaf height and volume of 2.80 cm and 200 cm³ respectively but exhibited the highest loaf weight of 205.50g. However, Sample A, (commercial bakers' yeast) had the highest loaf height and volume of 5.00 cm and 400 cm³ respectively. The sensory evaluation results showed sample D compared favorably with sample A in all the organoleptic attributes-(appearance, taste, crumb texture, crust colour and overall acceptability) tested for ($P < 0.05$). It was recommended that 4g compressed yeast isolate per 100g flour could be used to proof dough as a substitute for commercial bakers' yeast and produce acceptable bread loaves.

Keywords : isolation of yeast, performance evaluation of yeast, Raffia palm wine, used at different concentrations, proofing of bread dough

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