

Pengaruh Penambahan Ragi dan Waktu Fermentasi Terhadap Kualitas Cuka Beras Merah (*Oryza rufipogon*) *Effect of Addition of Yeast and Fermentation Time on the Quality of Red Rice Vinegar (*Oryza rufipogon*)*
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ABSTRACT

*Red rice vinegar is a fermented healthy drink by mixing rice with a fermented starter in the form of dry yeast and nuruk to become turbid rice wine, which is finally further fermented with the addition of acetic acid to become the final product in the form of healthy vinegar. This study aimed to produce a quality fermented vinegar product from the processing of red rice wine (*Oryza rufipogon*) with starter yeast and natural wheat yeast (nuruk) by using a reference to the length of fermentation time. This research was conducted using an experimental method designed using a Completely Randomized Design (CRD) Factorial with 2 factors. The first factor was the yeast addition treatment which consisted of 3 treatment levels, there are 8 grams (P1) 11 grams (P2), and 14 grams (P3) of yeast concentration, and The second factor is the treatment of variations in fermentation time which consisted of 3 treatment levels, there are 7 days (L1), 9 days (L2), and 11 days (L3). The observations included pH levels or degree of acidity, Brix or dissolved solids levels, alcohol potential, total acetic acid, and organoleptic (hedonic and hedonic quality). The addition of yeast concentrations and different fermentation times cause significantly different effects on the results of pH or degree of acidity, Brix or dissolved solids levels, alcohol potential, total acetic acid, hedonic (Shape, Color, and Taste), and hedonic quality (Shape, Color, and Taste). The interaction between those 2 factors causes a significantly different effect on the results of pH levels or degree of acidity, levels of Brix or dissolved solids, and potential for alcohol, whereas the results of total acetic acid cause an effect that is not significantly different. Treatment with the addition of 14 grams of yeast with a fermentation time of 11 days was the best treatment to produce acetic acid from red rice, with a 2.76% characteristic pH or degree of acidity, 3.46% Brix content or dissolved solids, 1.5% potential alcohol, and with total acetic acid 5.23%.*

Keywords: red rice, vinegar, fermentation, yeast.