

**Pengaruh Waktu Inkubasi Glucose Oxidase Dan Katalase Terhadap
Penurunan Kadar Gula Pereduksi Puree Mangga (*Mangifera indica* L.)
Varietas Gedong Gincu (*The Effect of Glucose Oxidase and Catalase Incubation
Time on the Reduction of Reducing Sugar Content in Mango (*Mangifera indica*
L.) Pulp of Gedong Gincu Variety*).**
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ABSTRACT

*Mango puree is a processed fruit product that has a relatively high reducing sugar content. This study aims to determine the effect of enzymatic hydrolysis using glucose oxidase and catalase enzymes on reducing reducing sugar levels and the characteristics of mango puree. The study was conducted descriptively with hydrolysis time treatments of 4 hours and 6 hours. The results showed that the lowest reducing sugar content was obtained at 4 hours of hydrolysis at 190.52 mg/mL, lower than 6 hours of hydrolysis at 350.88 mg/mL and the system at 538.74 mg/mL. Enzymatic treatment caused changes in the characteristics of mango puree, namely the **L*** value decreased from 74.88 to 65.70, the **a*** value increased from -0.39 to 4.90, and the **b*** value decreased from 34.99 to 31.40. Protein content increased from 0.51% to 0.81%, while fat content decreased from 4.59% to 1.33%, starch content from 11.35% to 8.87%, and carbohydrate content from 25.82% to 16.45%. Freeze-thaw stability increased from 0.32 to 0.34. Panelists' preference for color, aroma, and texture decreased, but the product remained acceptable. Based on the research results, enzymatic hydrolysis using glucose oxidase and catalase for 4 hours was able to reduce the reducing sugar content in mango puree and produce acceptable product characteristics.*

Keywords: Catalase, Enzymatic Hydrolysis, Glucose Oxidase, Mango Puree, Reducing Sugars.