

***The Effect of Acid Content and Time on the Hydrolysis of Cassava Peel Waste  
(Manihot Esculenta) in the Production of Bioethanol***  
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**ABSTRACT**

*Population growth increases the need for fuel. This is inversely proportional to the decrease in the availability of fossil fuels. Therefore, the Indonesian government aims to increase the mix of renewable energy sources. One possibility is to utilize cassava peel waste which contains 48% starch to be processed into bioethanol. One of the most important steps in bioethanol production is hydrolysis. This research focuses on increasing the efficiency of the hydrolysis process to produce reducing sugars. The hydrolysis process was carried out with variations in HCl concentrations, namely 7, 15 and 20% (v/v) and hydrolysis times of 10, 15 and 20 minutes. The strongest reducing sugars were obtained in the A3B2 reactor with 28.5° Brix, where hydrolysis was carried out at an acid concentration of 20% (v/v) for 15 minutes*Engineering Department

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