

Title	The Production of Ethanol from Bagasse and Waterhyacinth
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Abstract

The production of ethanol from bagasse and waterhyacinth by fermented bagasse and waterhyacinth with *Saccharomyces cerevisiae* yeast in order to change monosaccharide to ethanol. Analyse the ethanol everyday with Gas Chromatography. The quantity of ethanol from bagasse was higher than from waterhyacinth. Bagasse had 0.966 percent concentration of ethanol. Appropriateness day for fermented bagasse was 4 days. Waterhyacinth had 0.428 percent concentration of ethanol. Appropriateness days for ferment waterhyacinth was 3 days. The ratio of ethanol/bagasse was 80.499 g/kg. The ratio of ethanol/waterhyacinth was 40.803 g/kg.

The comparison of quantity of ethanol from fermented bagasse and waterhyacinth was determined by t – test independence. The result showed the significant different at .01 level. F-test was used to determined the quantities of ethanol from each day fermented. Both ethanol from bagasse and waterhyacinth which determined in each day showed the significant different at .01 level.