IDENTIFICATION OF ALCOHOL PRODUCTION FROM PINEAPPLE PEEL USING ISOLATED YEAST FROM FOOD WASTE WATER

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Final Year Project Submitted in
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ABSTRACT

IDENTIFICATION OF ALCOHOL PRODUCTION FROM PINEAPPLE PEEL USING ISOLATED YEAST FROM FOOD WASTE WATER

Alcohol can be produced from the grains of fruits or vegetables through a process called fermentation. The pineapple peels are easily available, least expensive raw materials and beneficial to food preservation industry. *Saccharomyces cerevisiae* is the common yeast that are able to produce alcohol due to its high alcohol productivity, high alcohol tolerance and ability of fermenting wide range of sugars. Main objectives are to identify alcohol production from pineapple peel using FTIR Spectrophotometer analysis and to evaluate the effectiveness of yeast (*Saccharomyces cerevisiae*) activity based on the optimum pH in the production of alcohol from pineapple peel. After incubation period of seven days at 24^{o}C, there were growth of yeast for all the samples. Simple staining is used to identify the morphology of yeast obtained. The best results that obtained after fermentation was from sample 3 which is from night market food wastes. For FTIR Spectrophotometer, the reading for 300ml was 3381.39 cm^{-1} which is the highest ethanol presence while pH meter analysis result showed that pH 4.71 was the optimum pH for growing yeast.