**ABSTRACT**

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**ORGANOLEPTIC ASSESSMENT AND ROLE OF FERMENTED BEVERAGE FROM SOURSOP LEAVES AS ANTI HYPERURICEMIA ON WISTAR RATS**

(xiv + 87 pages: 15 figures, 8 tables, and 26 appendices)

Previous study had shown that fermented beverage from sourpop leaves contains bioactive compounds, such as phenolic and flavonoid which can reduce cholesterol levels in the blood. The objective for this research was to determine the effect of fermented beverage from sourpop leaves was prepared with skim milk (2%), sugar (4%), Streptococcus thermophilus, Lactobacillus acidophilus, and Lactobacillus plantarum (2:1:2, 2% v/v) towards serum uric acid levels in the bloodstream, BUN, creatinine, SGPT and SGOT value of Wistar male rats. The fermented beverage from sourpop leaves was made into four different concentrations of sourpop leaves (1%, 2%, 3%, and 4%). The products were analyzed for pH value, total titratable acidity, total lactic acid bacteria, acceptability, total phenolic, and total flavonoid content. The results showed that based on these parameters, the best concentration of sourpop leaves was 3%. The chosen fermented product in this research was given to rats for 21 days and observed every week to determine the effect towards uric acid levels in the bloodstream. The results showed that the selected product was able to decreased uric acid levels in the bloodstream of Wistar male rats in contrast with control. The chosen fermented beverage from sourpop leaves was able to reduce the uric acid in the bloodstream as much as 11.66±0.77% for 7 days, 37.57±2.06 for 14 days, and 55.83±0.38 for 21 days. The reduction of uric acid levels by fermented beverage from sourpop leaves is able to reduce uric acid levels in the bloodstream higher than allopurinol and sourpop leaves tea. The result of BUN, creatinine, SGPT, and SGOT value of Wistar male rats were all normal.

Keywords: allopurinol, fermented beverage, sourpop leavers, uric acid, wistar rat