



### ABSTRACT

The main goal of this study was to determine the effect of anthocyanin-rich fruit extract from lipote on the male rat fed with high fat and high cholesterol diet. Another goal of this study was to determine the probable decrease in weight, cholesterol in liver and blood. Four groups of male rats, each consisting of four members, were subjected to the described treatments. The negative control group ( $T_0$ ) was fed with base diet alone. Treatment groups 2 and 3 ( $T_2$  &  $T_3$ ) were fed the same base diet plus increasing dose of anthocyanin-rich extract from lipote berries. Lastly, the positive control group ( $T_1$ ) was subjected to the same base diet plus the sucrose dissolved in drinking water and lard derived from pork fat. The weight of rats in each treatment group was monitored weekly for four weeks while the blood and liver cholesterol level were examined post-mortem. Based on the results of the data, Anthocyanin-rich lipote fruit extract can significantly lower the cholesterol level in male rat. Statistically there was a significant difference found in the excessive weight gain of the rat. Moreover, Anthocyanin significantly decreases the blood and liver cholesterol level in the male rat.