



### ABSTRACT

The hypoglycemic and hypocholesterolemic effect of *Persea americana* Mill. (avocado) leaf extract in Alloxan Monohydrate induced into albino rats was determined in the study. Twenty-four (24) rats were utilized in the experiment and divided into 4 groups. The rats were subjected to 1 week acclimatization. Initial blood glucose and cholesterol level were tested by a portable test kit. Induction of Alloxan Monohydrate was done intraperitoneally and after 2 days glucose and cholesterol levels were again tested. Thereafter, high fat diet for 4 weeks was given to the rats to induce high blood cholesterol. Different concentrations of avocado leaf extract were given orally by gavage method. Analysis of blood glucose and of blood cholesterol levels was done by a portable test kit every week for 4 weeks. Results showed a non-significant decrease in blood glucose and cholesterol in T<sub>1</sub>, T<sub>2</sub>, and T<sub>3</sub> compared with their initial glucose and cholesterol levels; while in the control group (T<sub>0</sub>), it showed a statistically significant change in the blood glucose and cholesterol levels of the diabetic albino rats was noted. This study has proven that avocado leaf extract can lower blood glucose and cholesterol level.

*Key words: Persea americana mill, rattus norvegicus, hypoglycemic, hypocholesterolemic*