



### ABSTRACT

Diabetes mellitus is a chronic disease that impairs glucose homeostasis and its complications are becoming a serious threat to the health of mankind. Many medicinal plants provide a potential source of hypoglycemic drug; thus the study was carried out to determine the potential of *Acalypha hispida* leaf extract on lowering the blood glucose level of alloxan-induced albino rats. Twenty four (24) albino rats were divided into four groups:  $T_0$  (diabetic control),  $T_1$  (375 mg/kg),  $T_2$  (750 mg/kg),  $T_3$  (1,500 mg/kg) and were acclimatized for three weeks prior to alloxan induction to induce diabetes. Four weeks was allotted for administration of different treatments via oral gavage method. Blood samples were collected after alloxan induction, and after treatment through tail snipping method. Blood glucose level analysis revealed that all the three doses of leaf extract exhibited a significant decrease on their glucose level however there is no significant difference among the different treatments with respect with its reducing potential.

Keywords: *Acalypha hispida*, alloxan, blood glucose level, diabetes, medicinal plants