ABSTRACT

The erythrocyte is a unique anuclear cell, with a cytoplasm consisting of 95% hemoglobin, the protein responsible for oxygen transfer from the lungs to the rest of the body. The purpose of this study is to further explore the RBC parameters, includes the count, size and color of the hyperglycemic induced male R. norvegicus. This study also uses various concentration of T.indica fruit extract to test the further the hypoglycemic effect of the species. the study has 3 groups based on the concentrations of T. indica fruit extract to be given with 3 male albino rats each. the male albino rats was established in hyperglycemic state with 120 mg/kg of alloxan monohydrate, afterwards given 2ml/100g T. indica fruit extract for 54 days. 1ml blood sample was taken to each rat for RBC data and blood glucose. The results show that there are no significant ($p<0.05$) difference on the RBC count, size and color after administering the various concentrations of T. indica fruit extract. Furthermore, the study shows a significant ($p<0.05$) difference on the RBC size before and after alloxan induced and RBC Size and color after alloxan induced and oral administration of the T. indica fruit extract. In addition, the study also shows a significant decrease on the blood glucose level or a hypoglycemic effect after administering the various concentration of T. indica fruit extract on the male R. norvegicus

Keywords: Tamarindus indica, Hypoglycemic, Hyperglycemic