



ABSTRACT

Diabetes is a chronic disease characterized by having a paramount quantity of glucose in the blood resulting to cases of hyperglycemia. Due to its global widespread, it has been the focus of various studies. Drugs used to counter the effects of diabetes are usually highly priced that is why some individuals refer to traditional medicine. This study aimed to investigate the effect of *Jasminum sambac* (Sampaguita) ethanolic leaf extract in lowering the blood glucose level of alloxan induced albino mice. After four weeks of treatment, the treatment group showed a significant difference between the post induction blood glucose level of the mice and the blood glucose level of the mice after the treatment. The control group and the treatment group showed the same effect in blood glucose regulation and this suggests that the Sampaguita ethanolic leaf extract is effective in lowering the blood glucose level of the alloxan induced diabetic mice. This blood glucose regulatory effect can be attributed to the phytochemicals present in the Sampaguita such as alkaloids, flavonoid, phenolic compounds and tannins.

Keywords: Diabetes, Metformin, Alkaloids, Flavonoids, Phenolic Compounds