



**EFFECTS OF *Jasminum sambac* L. (SAMPAGUITA) STEM EXTRACTS  
ON THE ALLOXAN-INDUCED HYPERGLYCEMIC  
*Mus musculus* (ALBINO MICE)**

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### ABSTRACT

This study aimed to determine the effects of *Jasminum sambac* L. (Sampaguita) stem extracts. Diabetes was induced in albino mice intraperitoneally using alloxan (60 mg/kg body weight). Different concentrations (50%, 75%, and 100%) of *Jasminum sambac* L. stem extracts were administered to the alloxan-induced hyperglycemic albino mice for 14 days. Approximately 1.5 ml/day of stem extract was given to each mice through oral gavage method. Tail snipping method was used to obtain the blood from the mice, and glucose level were determined using glucoSure star glucometer. The blood glucose level of the mice significantly increased ( $p=0.00000104$ ) after 7 days upon induction of alloxan. After administration of *Jasminum sambac* L. stem extracts, all treatments manifest significant reduction ( $p=0.00000168$ ) on the blood glucose level of albino mice. However, there is no significant difference ( $p \leq 0.05$ ) on the decreasing effect of different concentration of stem extracts. Hence, it is the 75% *Jasminum sambac* L. stem extract which exhibit the highest efficiency in lowering the blood glucose level. This ability to decrease blood glucose level could be due to the phytoconstituents such as flavonoids, tannins, and saponins.

**Keywords:** *Diabetes, Blood glucose level, Phytoconstituents, Intraperitoneal.*