



**EFFECTS OF *Angelica keiskei* (Miq) Koidz (ASHITABA) LEAF
ON BLOOD GLUCOSE LEVEL OF ALLOXAN-INDUCED
MALE *Rattus albus* (ALBINO RATS)**

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ABSTRACT

Diabetes is a chronic disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces. *Angelica keiskei* (Miq) Koidz, commonly known as ashitaba has been used in Japan and China as medicinal herbs due to its power of supplying vital nutrients. Diabetes was induced in rats intraperitoneally using alloxan monohydrate (100mg/kg body weight). Different dosages (150mg/kg, 250mg/kg, and 500mg/kg) of *A. keiskei* leaf was administered to the alloxan-induced rats for 28 days. The results showed that the administration of the different dosages of the *A. keiskei* significantly decreased the blood glucose level of the diabetic rats at $P < 0.05$. The comparison of means using one-way ANOVA among treatments showed a significance value of 0.037363239 at alpha 0.05. This means that there is a significant difference among different dosages of *A. keiskei*. Results showed that there is no significant difference on the reducing potential of 150mg/kg and 250mg/kg leaf powder treatment. Likewise, no significant difference was observed on 250mg/kg and 500mg/kg leaf powder treatment. However, there is a significant difference ($p \leq 0.05$) on the ability of 150mg/kg and 500mg/kg leaf powder in lowering blood glucose level in rats. This is suggestive of the efficiency range of: $T_1=T_2$, $T_2=T_3$, $T_1 \neq T_3$