



**EFFECTS OF *Ceiba pentandra* L. (KAPOK) SEED ETHANOLIC
EXTRACTS ON THE BLOOD GLUCOSE LEVEL
OF *Mus musculus* (ALBINO MICE)**

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ABSTRACT

Diabetes mellitus is a chronic disease in which blood glucose levels are higher than normal, and it is increasing drastically among the poor worldwide. The interest in the study of herbal medicines is growing due to some side effects caused by drugs available in the market for the treatment of diabetes such as Thiazolidinedione, Biguanides, Meglitide, Sulphonylureas, and Alpha-glucosidase inhibitors. The study determined the hypoglycaemic potential of Kapok (*Ceiba pentandra* (L.) Gaertn.) seeds ethanolic extract at different concentrations namely (T1 = 50%, T2 = 75%, T3 = 100%) using fifteen (15) alloxan-induced diabetic mice. Diabetes was determined by administering alloxan monohydrate in albino mice by intraperitoneal injection. The ethanolic extract of *C. pentandra* was administered orally per day to diabetic male albino mice for a period of three weeks. Blood glucose levels were monitored at specific intervals. It was found out that Kapok seed extract lowered the blood glucose levels of alloxan-induced diabetic mice but showed non-significant ($p=0.9937$) activity in between treatments. The extract could already significantly lower the blood glucose level of the mice at 50% concentration. The trend of the lowering effect of *Ceiba pentandra* is the higher the concentration, the higher the lowering effect. This lowering effect can be attributed to the presence of alkaloids, flavonoid, saponins, and tannins.

Key words: Diabetes mellitus, *Ceiba pentandra*, Kapok seeds, Alloxan, ethanol extract



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