

**HISTOPATOLOGY KIDNEYS OF MICE (*Mus musculus*) MODEL
OF HYPERGLYCEMIA TREATED WEED EXTRACT
BERMUDAGRASS (*Cynodon dactylon*) NON-
POLYSACCHARIDE FRACTION**

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ABSTRACT

This study was undertaken to investigate the hypoglycemic effect of repeated oral administration of the non-polysaccharide fraction of aqueous extract of *Cynodon dactylon* (NPF-CD) in overload glucose induced hyperglycemic mice, overload glucose multiple low doses were oral administered 2 kg/BW for 15 days. A total of thirty male BALB-C mice of two months old were used in this study. The mice were divided into five groups: (1) normal group (K0), mice without giving any, (2) Group negative control (K-) mice hyperglycemia without therapy, (3) the positive control group (K+) mice hyperglycemic and treated metformin as standard drugs, (4) NPF-CD 250 mg/kgBW (P2), (5) NPF-CD 500 mg/kgBW (P3), (6) NPF-CD 750 mg/kgBW (P4), (7) NPF-CD 1000mg/kgBW, The treatment is carried out for 10 days. At the end of the experiment, all the mice euthanized and kidneys on the dexter were collected by abdominal section, and observed whether there is improvement that occurs in renal tubular cells including parameters observed lesions is the presence of degeneration, necrosis and protein cast. This research using *Kruskal-Wallis* analysis and if significantly different results followed by a multiple comparison test (Z test). The result of this study showed that non-polysaccharide fraction of aqueous extract of *Cynodon dactylon* has high antidiabetic potential at hypoglycemic and keep the quality of renal tubular cells. Comparatively, the NPF-CD 250 mg/kgBW was found to be more effective than the metformin as a standard drug.

Keywords: Antidiabetic activity, hyperglycemia, kidney, metformin, Non-Polysaccharide Fraction of *Cynodon dactylon*