

THERAPEUTIC EFFECT OF EXTRACT COUCH GRASS (*Cynodon dactylon*) ON LIVER HISTOPATHOLOGICAL FEATURES OF MALE BALB/C MICE (*Mus musculus*) WITH DIABETES MELLITUS STREPTOZOTOCIN INDUCTION

Muhammad Nazar Fuddin

ABSTRACT

This study was undertaken to investigate therapeutic effect of extract couch grass (*Cynodon dactylon*) on liver histopathological features of male BALB/C mice (*Mus musculus*) with Diabetes Mellitus streptozotocin induction. A total of twenty four male BALB/C mice of two months old were used in this study. The mice were divided into six groups: (K0-) negative control group that were not diabetic and not treated, (K1+) positive control group that were manipulated diabetic with multiple low doses of streptozotocin were induced intraperitoneally administered 40 mg/kgBW for five days and not treated, (K2) drug control group that were manipulated diabetic and treated metformin as a standard drug. Meanwhile P1, P2 and P3 were the treatment group with doses 250 mg/kgBW, 500 mg/kgBW and 1000 mg/kgBW respectively. The treatment was conducted for 14 days. At the end of experiment, all of mice were sacrificed and the liver were collected for histopathological analyzed. The data collected were analyzed with Kruskal Wallis and Mann Whitney test. The result showed there were significant different ($p < 0,05$) between treatment groups. It was been proved that couch grass (*Cynodon dactylon*) administration with doses 250 mg/kgBW (P1) was effective as metformin on reducing histopathological changes of diabetic liver mice.

Keywords : *Cynodon dactylon*, diabetic, streptozotocin, histopathological, liver