

ABSTRACT

This study aims to determine the effect of the extract of the moon flower (*Tithonia diversifolia*) on degeneration and necrosis cells in white rat hepatocytes (*Rattus norvegicus*) with diabetes mellitus. This study used rats with diabetes mellitus that were intraperitoneally induced by Streptozotocin with a single dose of 45 mg / kg. The sample consisted of twenty rats divided into five groups, the negative control group (K0) was not induced with Streptozotocin, but treated with 1% CMC Na, the positive control group (K +) was induced with Streptozotocin without treatment, group 1 (P1) was induced with Streptozotocin and given a month flower extract at a dose of 100 mg / kgBB, group 2 (P2) was induced with Streptozotocin and a moon extract extract was given at a dose of 200 mg / kgBB, group 3 (P3) was induced with Streptozotocin and a month flower extract was given a dose of 400 mg / kg kgBB every day for 14 days. The results showed the median histopathological changes in degenerated hearts, namely 2.13 (K0), 3.00 (K +), 2.38 (P1), 2.00 (P2), 2.50 (P3) and those that experiencing necrosis namely 1.50 (K0), 2.25 (K +), 1.88 (P1), 1.63 (P2), 1.75 (P3). The conclusion of the study showed that the extract of the moon flower can affect the liver histopathology of white rats with an effective dose of 200 mg / kgBB (P2) which was significantly different ($p < 0.05$) compared to dose 100mg/kgBW (P1), dose 400mg/kgBW (P3) and positive control group (K +).

Keywords : Streptozotocin, extract kembang bulan leaves, Diabetes Mellitus, hepatocytes, degeneration and necrosis.