EFFECT OF *Polygonum minus* LEAVES ETHANOL EXTRACT AS A PREVENTIVE AGAINST MERCURIC CHLORIDE TOXICITY IN HISTOLOGICAL FEATURES OF MICE (*Mus musculus*) TESTIS

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ABSTRACT

The purpose of this research are to prove the effect of *Polygonum minus* leaves ethanol extract as a preventive against mercuric chloride ($HgCl_2$) toxicity in seminierous tubules epithelium thickness and spermatocyte cells count. This research use Completely Randomized Design with 20 male Balb/C mice divided into 5 groups and 4 mice each group. Treatment consisted of C- administered orally CMC Na 0.5% and aquadest only, C+ administered orally CMC Na 0.5%, T1 200 mg/kg bw, T2 400 mg/kg bw, T3 800 mg/kg bw *Polygonum minus* leaves extract administered orally then given 8 mg/kg bw $HgCl_2$ solution after one hour. The research takes 7 days adaptation and 21 days treatment. Observations conducted by making histologic preparations of testicular organs, five seminiferous tubules observed from each replication to measure the epithelium thickness and count the spermatocyte cells. The data were analyzed with Analysis of Variance (Anova), and Duncan test. The result showed seminiferous tubules epithelium thickness have simillar data with the spermatocyte cells count but no significant ($P>0.05$) in all groups while there was a significant difference ($P<0.05$) for spermatocyte cells count data. The best result are shown from T1 group treated with 200 mg/kg bw *Polygonum minus* ethanol extract.

Keywords : *Mercuric Chloride, Polygonum minus, Seminiferous tubules epithelium thickness, Spermatocyte cells*