EFFECT OF Moringa oleifera LEAF EXTRACT ON THE HISTOPATHOLOGICAL FEATURES OF TESTICULAR SEMINIFEROUS TUBULES OF MICE (Mus musculus) EXPOSED TO METHYLMERCUry

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ABSTRACT

This research aimed to demonstrate the effect of Moringa oleifera leaf extract on the histopathological features of testicular seminiferous tubules of mice (Mus musculus) exposed to methylmercury. Twenty male mice were divided into five groups (C−, C+, T1, T2, T3) and treated for 21 days. C− were administered 0.01 ml aquadest, C+ were administered 0.4 mg/kg bw methylmercury, T1 were administered 200 mg/kg bw Moringa oleifera leaf extract + 0.4 mg/kg bw of methylmercury, T2 were administered 400 mg/kg bw Moringa oleifera leaf extract + 0.4 mg/kg bw methylmercury, and T3 were administered 800 mg/kg bw Moringa oleifera leaf extract + 0.4 mg/kg bw methylmercury. The histopathological features of testicular seminiferous tubules were examined using Modified Johnsen Scoring method. The obtained data were analyzed with Kruskal-Wallis and Mann-Whitney test. The result showed that Moringa oleifera leaf extract reduced the damage of testicular seminiferous tubules of mice (Mus musculus) exposed to methylmercury. The dose of 400 mg/kg bw Moringa oleifera leaf extract gave the best protective effect compared to those of 200 and 800 mg/kg bw.

Keywords: Moringa oleifera, Methylmercury, Testes, Seminiferous Tubules.