EFFECTIVENESS OF KELOR (Moringa oleifera) LEAVES ETHANOLIC EXTRACT AS A HEPATOPROTECTIVE OF MICE (Mus musculus) INDUCED TO METHYLMERCURY

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ABSTRACT

This research aimed to investigate the protective effect of Moringa oleifera ethanolic extract towards histopathological changes of hepatic cells including hepatocytes and kupffer cells induced by methylmercury in mice (Mus musculus). There are 25 male mice used in this research then were divided into 5 groups. Each group received different treatment with oral administration for 21 days. C-(0.2 ml aquadest), C+ (0.4 mg/kg bw methylmercury), T1, T2 and T3 (200, 400 and 800 mg/kg bw Moringa oleifera leaves ethanolic extract respectively + 0.4 mg/kg bw of methylmercury). The histopathological features of liver were examined under light microscope in 100 and 400 times magnification. Scoring method were using Arsad Scoring Method to examined the presence of activated kupffer cells, sinusoidal dilatation, cytoplasmic vacuolation, karyorrhexis and karyolysis. Then, Kruskal-Wallis test followed with Mann-Whitney test of statistical analysis. The result showed that Moringa oleifera ethanloic extract could not protect the liver exposed by methylmercury. It is showed that the antioxidant content of Moringa oleifera extract consisted quercetin and kaempherol could not resist methylmercury intoxication in liver.

Keywords: Moringa oleifera, liver, methylmercury