THE EFFECT OF PASAK BUMI ROOT EXTRACT (*Eurycoma longifolia*) ON LIVER HISTOPATHOLOGY RATS (*Rattus norvegicus*) EXPOSED MONOSODIUM GLUTAMATE

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ABSTRACT

This research aimed to know the effect of pasak bumi root extract (*Eurycoma longifolia*) on liver histopathology of rats (*Rattus norvegicus*) which were exposed to monosodium glutamate. Twenty-five male rats were divided into five treatment groups. The treatment was done for 30 days, each treatment consisted of K(-) as a negative control given 0.5% Na-CMC 2ml and 1ml aquadest, P0 was given 2ml aquadest and MSG 4g/kgBW/day. Meanwhile P1, P2 and P3 were given respectively 400, 600 and 900 mg/kgBW/day pasak bumi roots extract and MSG 400g/kgBW/day. The results showed that the means of hepatocyte cell underwent degeneration in K(-), P 0, P1, P2, and P3 were respectively 4.20 ± 3.01, 19.60 ± 2.53, 21.30 ± 3.56, 13.10 ± 1.67, 6.80 ± 2.46 and hepatocyte cells underwent necrosis were 3.00 ± 0.00, 18.40 ± 1.34, 22.60 ± 219. 13.00 ± 1.54, 8.00 ± 1.41. Based on the results of the research, it could be concluded that pasak bumi root extract in rats could be used as a prevention of hepatocyte cell from degeneration and necrosis in rats exposed to MSG (p <0.05). Dose that can prevent hepatocyte cells from degeneration and necoses due to exposure to MSG was 900 mg/kgBW/day.

**Key words:** Pasak Bumi, Hepatocyte cells, Monosodium glutamate