ABSTRACT

HEPATOTOXIC TEST OF THE MIXTURE FROM MANGOSTEEN (Garcinia mangostana Linn.) PERICARP DRY EXTRACT AND KUMIS KUCING (Orthosiphon stamineus Benth.) EXTRACT IN MICE (Mus musculus)

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Hepatotoxicity is one of the serious adverse effect of the drugs. The aim of the research was to determined hepatotoxic effect of from the mixture from dry extract of Garcinia mangostana Linn and Orthosiphon stamineus Benth in male white mice (Mus musculus). In this research, 24 mice were divided randomly into 4 groups with 1 control group and 3 groups with different doses (23 mg/kg BW; 69 mg/kg BW; and 115 mg/kg BW) given treatment orally of mixture from dry extract of Garcinia mangostana Linn and Orthosiphon stamineus Benth during 28 days with ratio 1:1. The mice were sacrificed on the twenty ninth day to analyze transaminase enzymes (SGOT and SGPT) and macroscopic appearance and histopatological of liver. Data was analyzed using One Way Anova test and Kruskal-Wallis. The result of biochemical analysis in the blood levels of SGOT and SGPT increased but remained are within normal limit. Result statistically analyzed by Anova test for SGOT and SGPT showed there were not significantly difference between groups. The result showed present light necrosis and degeneration on all of the group treatment. Result of statistically analyzed by Kruskal-Wallis tests showed there were not significantly difference for histopathological of liver. The conclusion is mixture from dry extract of Garcinia mangostana Linn and Orthosiphon stamineus Benth in 1:1 ratio with doses equivalent to 23 mg/20g body weight; 69 mg/20g body weight and 115 mg/20g body weight had no hepatotoxict effect on male mice’s liver.

Keyword: Garcinia mangostana Linn., Orthosiphon stamineus Benth., hepatotoxic effect in mice, SGOT, SGPT.