

INTISARI

Penelitian ini bertujuan untuk membuktikan efek hepatoprotektif infusa daun *Swietenia mahagoni* (L.) Jacq. terhadap penurunan kadar ALT dan AST serum pada tikus terinduksi karbon tetraklorida dan mengetahui dosis optimum pemberian infusanya.

Penelitian ini termasuk penelitian eksperimental murni dengan rancangan acak pola searah. Penelitian ini digunakan 35 ekor tikus dibagi dalam 7 kelompok. Kelompok I (kontrol hepatotoksin) diberikan larutan karbon tetraklorida : *olive oil* (1:1) dosis 2 mL/kgBB secara intraperitoneal. Kelompok II (kontrol pelarut hepatotoksin) diberi *olive oil* dosis 2 mL/kgBB secara intraperitoneal. Kelompok III (kontrol pelarut infusa) diberi aquadest 25mL/kgBB selama 6 hari berturut-turut secara peroral. Kelompok IV (kontrol infusa) diberi infusa daun *S. mahagoni* dosis 5 g/kgBB selama 6 hari berturut-turut secara peroral. Kelompok V, VI dan VII (kelompok perlakuan) diberikan infusa daun *S. mahagoni* dosis berturut-turut 2,5; 3,535 dan 5 g/kgBB selama 6 hari berturut-turut secara peroral, kemudian dihari ke tujuh diberi larutan karbon tetraklorida : *olive oil* (1:1) dosis 2 mL/kgBB secara intraperitoneal, 24 jam kemudian semua kelompok darahnya diambil dari *sinus orbitalis* mata untuk diukur aktivitas serum ALT dan AST. Data serum ALT dan AST dianalisis menggunakan ANOVA satu arah, dengan taraf kepercayaan 95%.

Hasil penelitian menunjukkan, infusa daun *S. mahagoni* memberikan efek hepatoprotektif dengan menurunkan aktivitas serum ALT dan AST pada tikus terinduksi karbon tetraklorida. Dosis optimum pemberian infusa daun *S. mahagoni* yang diperoleh dalam penelitian ini adalah 5 g/kgBB dengan persen hepatoprotektif sebesar 63,9%.

Kata kunci : Hepatoprotektif, Infusa daun *Swietenia mahagoni* (L.) Jacq., ALT dan AST, karbon tetraklorida

ABSTRACT

The aim of study research were to prove the hepatoprotective effect of Swietenia mahagoni (L.) Jacq. leaves infusion to decrease serum level of ALT and AST in rats induced with carbon tetrachloride and to decide the optimum dose of the infusion.

This research is purely experimental research with randomized complete direct sampling design. A total of 35 male Wistar rats were divided randomly into 7 groups. Group I (hepatotoxin control) was given carbon tetrachloride dissolved in olive oil (1:1) at dose of 2mL/kgBW intraperitoneally. Group II (hepatotoxin solvent control) was given a dose 2mL/kgBW olive oil in intraperitoneal. Group III was infusion solvent control given 25mL/kgBW of aquadest p.o for six days. Group IV was control treatment given 5g/kgBW infusion of S. mahagoni p.o for six days. Group V, VI and VII were given 2.5; 3.535; and 5 g/kgBW dose infuse of S. mahagoni leaves for six days orally and then on the seventh day, all treatment and infusion solvent control groups were given the carbon tetrachloride 2 mL/kgBW intraperitoneal. After 24 hours, the blood was collected from the orbital sinus eye to be measured ALT and AST serum activity. ALT and AST serum data were analyzed statistically by unidirectional ANOVA, with 95% confidence level.

The result of this study shown, that the infuse of S. mahagoni leaves, has hepatoprotective effect by decreasing the activities of ALT and AST serum in rats induced tetrachloride carbon. The optimum dose of S. mahagoni leaves infusion was 5g/kgBW.

Keywords : *Hepatoprotective, Swietenia mahagoni (L.) Jacq. leaves infuse, ALT and AST, carbon tetrachloride*