

INTISARI

Penelitian ini bertujuan untuk mengetahui efek hepatoprotektif dan dosis efektif pemberian jangka panjang ekstrak etanol 70% herba *Sonchus arvensis* Linn. pada tikus jantan terinduksi karbon tetraklorida.

Penelitian ini menggunakan 30 tikus jantan galur Wistar, umur 2-3 bulan, berat badan 150-250 g, dan dibagi secara acak ke dalam enam kelompok, tiap kelompok lima ekor tikus. Kelompok I (kontrol hepatotoksin) diberi karbon tetraklorida 2 mL/kgBB *intraperitoneal*. Kelompok II (kontrol negatif) diberi *olive oil* 2 mL/kgBB *intraperitoneal*. Kelompok III (kontrol perlakuan) diberi ekstrak etanol 70% herba *Sonchus arvensis* Linn. 1,5 g/kgBB per oral. Kelompok IV-VI (kelompok perlakuan) diberi ekstrak etanol 70% herba *Sonchus arvensis* Linn. dosis 0,375; 0,75; 1,5 g/kgBB per oral 6 hari, sekali sehari. Kemudian hari ke-7 diinduksi karbon tetraklorida 2 mL/kgBB *intraperitoneal*. Jam ke-24 setelah pemberian karbon tetraklorida dilakukan pemeriksaan aktivitas serum ALT dan AST pada semua kelompok perlakuan. Data aktivitas serum ALT dan AST dianalisis secara statistik menggunakan *software* RStudio.

Hasil penelitian menunjukkan bahwa pemberian ekstrak etanol 70% herba *Sonchus arvensis* Linn. memberikan efek hepatoprotektif dengan menurunkan aktivitas serum ALT dan AST. Hasil persen hepatoprotektif berturut-turut adalah 83,8; 57,1; dan 71,3 %. Berdasarkan data, dosis efektif pemberian ekstrak etanol 70% herba *Sonchus arvensis* Linn. sebesar 0,375 g/kgBB.

Kata kunci: herba *Sonchus arvensis* Linn., ekstrak etanol 70%, hepatoprotektif, karbon tetraklorida, ALT, AST

ABSTRACT

The aim of study research were to determine the effect of hepatoprotective and effective dose long-term administration of 70% ethanolic extract of *Sonchus arvensis* Linn. herb in male rats induced by carbon tetrachloride.

This study used 30 male Wistar rats, aged 2-3 months, body weight 150-250 g, and were randomly divided into six groups, each group of five mice. Group I (control hepatotoxins) were given carbon tetrachloride 2 mL/kgBW intraperitoneally. Group II (negative control) were given olive oil 2 mL/kgBW intraperitoneally. Group III (control treatment) were given a 70% ethanolic extract of *Sonchus arvensis* Linn. herb 1.5 g/kgBW orally. Group IV-VI (treatment group) were given a 70% ethanolic extract of *Sonchus arvensis* Linn. herb with dose 0.375; 0.75; 1.5 g/kgBW orally for six days, once a day. Then in seventh day carbon tetrachloride 2 mL/kgBW was induced intraperitoneally. Twenty-four hours after administration of carbon tetrachloride examination of ALT and AST serum activity in all treatment groups. Data activity of ALT and AST serum were statistically analyzed using RStudio software.

The results showed that 70% ethanolic extract of *Sonchus arvensis* Linn. herb had hepatoprotective effect by reducing the activity of ALT and AST serum. Results percent hepatoprotective row is 83.8; 57.1; and 71.3%. Based on the data, the effective dose 70% ethanolic extract of *Sonchus arvensis* Linn. herb were 0.375 g/kgBW.

Keywords : *Sonchus arvensis* Linn. herb, 70% ethanolic extract, hepatoprotective, carbon tetrachloride, ALT, AST