

## INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh waktu pemberian ekstrak etanol biji *Persea americana* Mill. secara akut terhadap kadar kreatinin dan gambaran histologis ginjal tikus terinduksi karbon tetraklorida dan mengetahui waktu pemberian yang paling efektif.

Penelitian ini merupakan penelitian eksperimental murni dengan rancangan acak lengkap pola searah. Sebanyak 30 ekor tikus jantan galur Wistar, umur 2-3 bulan dengan berat 150-250 gram dibagi secara acak ke dalam 6 kelompok. Kelompok I (kontrol nefrotoksin) diberi karbon tetraklorida dosis 2 ml/kgBB secara i.p. Kelompok II (kontrol negatif) diberi *olive oil* dosis 2 ml/kgBB secara i.p. Kelompok III (kontrol ekstrak) diberi ekstrak etanol biji *Persea americana* Mill. dengan dosis 350 mg/kgBB secara p.o. Kelompok IV, V, dan VI (kelompok perlakuan) diberi ekstrak etanol biji *Persea americana* Mill. dosis 350 mg/kgBB secara p.o, kemudian secara berturut-turut pada jam ke 1, 4 dan 6 setelah pemberian ekstrak etanol dilakukan pemberian karbon tetraklorida dosis 2 ml/kgBB secara i.p. Pada jam ke-48 setelah pemberian karbon tetraklorida, semua kelompok diambil darahnya pada daerah *sinus orbitalis* mata untuk penetapan kadar kreatinin. Kemudian tikus dikorbankan dan diambil ginjalnya untuk dibuat preparat guna pengamatan histologis. Data kadar kreatinin yang diperoleh dianalisis secara statistik menggunakan *one way* ANOVA dan dilanjutkan uji *Scheffe* dengan tingkat kepercayaan 95%.

Hasil penelitian ini menunjukkan bahwa waktu pemberian ekstrak etanol biji *Persea americana* Mill. dosis 350 mg/kgBB secara akut berpengaruh terhadap penurunan kadar kreatinin dan perbaikan gambaran histologis ginjal tikus terinduksi karbon tetraklorida. Waktu paling efektif dalam menurunkan kadar kreatinin tikus terinduksi karbon tetraklorida yaitu 4 jam setelah pemberian ekstrak etanol biji *P.americana* dosis 350 mg/kgBB.

**Kata kunci : biji *Persea americana* Mill., ekstrak etanol, akut, kreatinin, karbon tetraklorida**

## ABSTRACT

This study aimed to determine the administration time effect of ethanol seed extract of *Persea americana* Mill. in acute on creatinine levels and renal histological figure in carbon tetrachloride-induced rats and to determine the most effective administration time.

This study is purely experimental with completely randomized design. A total of 30 male Wistar rats, aged 2-3 months, weighing 150-250 g were randomly divided into 6 groups, five rats each. Group I (nephrotoxin control) was administered 2 ml/kgBW of carbon tetrachloride by i.p. Group II (negative control) was administered 2 ml/kgBW of *olive oil* by i.p. Group III (extract control) was orally administered ethanol seed extract of *Persea americana* Mill. at a dose of 350 mg/kgBW for 6 hours. Group IV-VI (treatment groups) were orally administered 350 mg/kgBW of *P. americana* ethanol seed extract. Then successively on the 1<sup>st</sup>, 4<sup>th</sup> and 6<sup>th</sup> hours after administration of ethanol seed extract, 2 ml/kgBW of carbon tetrachloride was injected. Fourty eight hours after administration of carbon tetrachloride, all groups have blood drawn at eye orbital sinus area for the determination of creatinine levels. Then the rats were sacrificed and kidneys were taken for histological observations. Creatinine levels obtained data were statistically analyzed using one-way ANOVA and followed by *Scheffe* test with a 95% confidence level.

This study showed that the administration time of ethanol seed extract of *Persea americana* Mill. in acute effect on the decline of creatinine levels and renal histological figure in carbon tetrachloride-induced rats. The most effective time in lowering creatinine levels of carbon tetrachloride-induced rats is 4 hours after administration of the ethanol seed extract of *P. americana* at a dose of 350 mg /kgBW.

**Key words :** *Persea americana* Mill. seed, ethanol extract, acute, creatinine, carbon tetrachloride