

## INTISARI

Penelitian ini bertujuan untuk mengetahui efek hepatoprotektif pemberian jangka panjang dekokta kulit buah *Persea americana* Mill. pada tikus jantan galur Wistar terinduksi karbon tetraklorida dengan melihat penurunan aktivitas *alanine aminotransferase* (ALT) dan *aspartate aminotransferase* (AST) serta untuk mengetahui dosis pemberian dekokta kulit buah *Persea americana* Mill. yang mampu menimbulkan efek hepatoprotektif.

Penelitian ini merupakan penelitian eksperimental murni dengan rancangan acak lengkap pola searah. Tiga puluh ekor tikus dibagi dalam 6 kelompok perlakuan. Kelompok I (kontrol hepatotoksin) diberi karbon tetraklorida 2 mL/kgBB secara i.p. Kelompok II (kontrol negatif) diberi *olive oil* 2 mL/kgBB secara i.p. Kelompok III (kontrol perlakuan) diberi dekokta kulit buah *Persea americana* Mill. dosis 1600 mg/kgBB secara p.o. Kelompok IV-VI (perlakuan) berturut-turut diberikan dekokta kulit buah *Persea americana* Mill. dosis 363, 762, dan 1600 mg/kgBB secara p.o. sekali sehari selama 6 hari kemudian pada hari ke-7 diberikan karbon tetraklorida secara i.p. Darah diambil dari sinus orbitalis mata pada jam ke-24 setelah pemberian karbon tetraklorida untuk diukur aktivitas ALT dan AST. Data dianalisis dengan uji *Kolmogorov-Smirnov* untuk melihat distribusi data, dilanjutkan analisis uji *Mann-Whitney* untuk mengetahui perbedaan aktivitas ALT dan AST antar kelompok.

Hasil penelitian menunjukkan adanya efek hepatoprotektif dekokta kulit buah *Persea americana* Mill. dengan %hepatoprotektif dari peringkat dosis 1 hingga 3 secara berurutan adalah 74,0; -61,8; -75,4%. Dari data pengukuran aktivitas ALT dan AST yang diperoleh, dekokta kulit buah *Persea americana* Mill. dosis 363 mg/kgBB memberikan efek hepatoprotektif dengan menurunkan aktivitas serum ALT dan AST pada tikus jantan galur Wistar terinduksi karbon tetraklorida.

**Kata kunci :** *Persea americana* Mill., hepatoprotektif, jangka panjang, karbon tetraklorida, dekokta, ALT,AST

### ABSTRACT

The aim of study research were to get information about long term hepatoprotective effect of decoction *Persea americana* Mill. skin for reducing activity of alanine aminotransferase (ALT) and aspartate aminotransferase (AST) in male Wistar rats induced by carbon tetrachloride and get information about dose from decoction *Persea americana* Mill. skin able to provide hepatoprotective effect.

This research was purely experimental research with randomized complete direct sampling design. This research used 30 male Wistar rats and divided into six treatment groups. Group I (hepatotoxin control) was given carbon tetrachloride 2 mL/kgBW i.p. Group II (negative control) was given *olive oil* 2 mL/kgBW i.p. Group III (treatment control) was given decoction of *Persea americana* Mill. skin dose 1600 mg/kgBW orally. Group IV-VI (treatment) was given decoction of *Persea americana* Mill. skin dose 363, 762, and 1600 mg/kgBW orally once a days for six days successively and then in the seventh day all of treatments group were given carbon tetrachloride 2 mL/kgBW by i.p. At the 24th hour after administration of carbon tetrachloride, all groups had blood drawn at the orbital sinus region to measured activity of ALT and AST. Data of ALT and AST which were obtained were analyzed using *Kolmogorov-Smirnov* test to look at the data distribution. After that, the data were analyzed using *Mann-Whitney* test to determine the differences in ALT activities and AST in each group.

The results showed there were hepatoprotective effects of decoction of *Persea americana* Mill. skin with %hepatoprotective effect from smallest dose to largest dose was 74.0; -61.8; -75.4%. From the data measurement of activities ALT and AST which were obtained, decoction of *Persea americana* Mill at a dose of 363 mg/kgBW had hepatoprotective effect to reduce activity of ALT and AST in male Wistar rats induced by carbon tetrachloride.

**Keywords :** *Persea americana* Mill., hepatoprotective, decoction, long term, ALT, AST, carbon tetrachloride