

ABSTRAK

Hepatotoksisitas yang diinduksi oleh obat antituberkulosis termasuk Rifampisin dan Isoniazid. (AT-DILI=*Anti Tuberculosis-Drug Induced liver Injury*) adalah reaksi merugikan yang serius dengan morbiditas yang signifikan. Sejumlah penelitian berdasarkan *in vivo* dan *in vitro* telah mengkonfirmasi kandungan biji pepaya berbagai unsur penting seperti vitamin A, C, E, dan kaya akan mineral seperti magnesium, kalium, asam pantotenat dan folat serta kaya akan serat, peran mereka dalam pencegahan penyakit melalui modulasi berbagai proses seperti anti radang, anti diabetes, aktivitas imunomodulator dan aktivitas antioksidan pepaya menunjukkan peran dalam netralisasi generasi radikal bebas dan akhirnya mencegah patogenesis. Penelitian ini bertujuan untuk mengetahui efek hepatoprotektif ekstrak etanol biji pepaya (EEBP) pada tikus yang diinduksi Rifampisin dan Isoniazid. Penelitian ini dibagi menjadi 8 kelompok termasuk kelompok normal, kelompok negatif 1, kelompok negatif 2, kelompok negatif 3, kelompok positif, kelompok perlakuan I (ekstrak etanol biji pepaya (EEBP) dosis 100 mg/kgBB), kelompok perlakuan II (ekstrak etanol biji pepaya (EEBP) dosis 300 mg/kgBB), dan kelompok perlakuan III (ekstrak etanol biji pepaya (EEBP) dosis 500 mg/kgBB) kemudian tikus dibedah dan diambil darah dan dilakukan pengukuran kadar ALT, AST, Alkali fosfatase, Gamma GT, dan Bilirubin. Hasil penelitian menunjukkan bahwa ekstrak etanol biji pepaya (EEBP) dapat menurunkan kadar ALT, AST, Alkali fosfatase, Gamma GT, dan Bilirubin yang berbeda signifikan ($P < 0,05$) terhadap kelompok kontrol negatif. Kadar flavonoid yang tinggi pada biji pepaya mencegah reaksi oksidatif stres yang disebabkan oleh Rifampisin dan Isoniazid.

Kata kunci : Rifampisin, Isoniazid, Hepatoprotektif.

ABSTRACT

Hepatotoxicity induced by antituberculosis drugs including Rifampicin and Isoniazid (AT-DILI = Anti-Tuberculosis-Drug Induced liver Injury) is a serious adverse reaction with significant morbidity. . A number of studies based on in vivo and in vitro have confirmed the contents of papaya seeds of various important elements such as vitamins A, C, E, and rich in minerals such as magnesium, potassium, pantothenic acid and folate as well as being rich in fiber, their role in preventing diseases through modulation of various processes such as anti inflammatory, anti diabetic, immunomodulatory activity and antioxidant activity of papaya show a role in the neutralization of free radical generation and ultimately prevent pathogenesis. This study aims to determine the hepatoprotective effect of papaya seed ethanol extract(PSEE) in Rifampicin and Isoniazid induced mice. This research was divided into 8 groups including normal group, negative group 1, negative group 2, negative group 3, positive group, treatment group I (papaya seed ethanol extract(PSEE) dose 100 mg / kg body weight), treatment group II (papaya seed ethanol extract(PSEE)dose 300 mg / kg body weight), and treatment group III (papaya seed ethanol extract(PSEE) dose 500 mg / kg body weight) then the mice were dissected and blood was taken and measured as ALT, AST ,Alkaline Phosphatase, Gamma GT, and Bilirubin levels. The results showed that papaya seed ethanol extract(PSEE)could significantly reduce levels of ALT, AST, Alkaline phosphatase, Gamma GT, and Bilirubin ($P < 0.05$) against the negative control group. High levels of flavonoids in papaya seed prevent oxidative stress reactions caused by Rifampicin and Isoniazid.

Keywords: Rifampicin, Isoniazid, Hepatoprotective.

