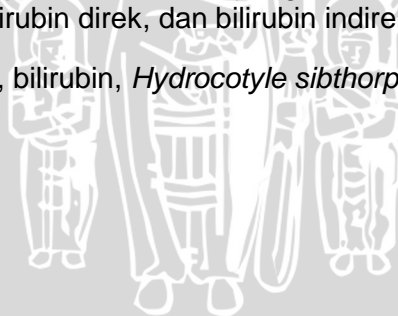


## ABSTRAK

Miladewi, Ketut Ayu. 2015. Pengaruh Ekstrak *Hydrocotyle sibthorpioides* Lam. terhadap Kadar ALT, AST, ALP, dan Bilirubin pada Tikus Wistar Jantan yang Diinduksi Obat Anti Tuberkulosis (Ekstraksi Dilakukan dengan Pelarut Ethanol 70%). Tugas Akhir, Program Studi Farmasi Fakultas Kedokteran Universitas Brawijaya. Pembimbing: (1) Dra. Siti Jazimah Iswarin, M.Si., Apt. (2) Adeltrudis Adelsa D., S.Farm., M.Farm.Klin., Apt.

Isoniazid, rifampin dan pirazinamid tergolong obat penginduksi *Drug Induced Liver Injury* (DILI) karena dapat menyebabkan efek samping hepatotoksik dengan tanda-tanda seperti peningkatan ALT, AST, ALP, dan bilirubin. Asiatikosida dalam semanggi gunung (*Hydrocotyle sibthorpioides* Lam) dapat berperan sebagai hepatoprotektor karena bersifat antioksidan. Penelitian ini bertujuan untuk mengetahui pengaruh ekstrak semanggi gunung yang mengandung asiatikosida dosis 5, 10, dan 20 mg/kgBB/hari terhadap kadar AST, ALT, ALP, dan bilirubin. Studi eksperimental ini menggunakan *post test only control group design* terhadap 25 tikus wistar jantan. Sampel dipilih dengan cara *simple random sampling* untuk dibagi lima kelompok, yaitu: grup I = plasebo, grup II = kontrol negatif, grup III = dosis 5 mg/kgBB/hari, grup IV = dosis 10 mg/kgBB/hari, dan grup V = dosis 20 mg/kgBB/hari. Hasil penelitian menunjukkan bahwa tidak terdapat pengaruh yang bermakna antara pemberian ekstrak dosis 5, 10, dan 20 mg/kgBB dengan penurunan kadar ALT, AST, bilirubin total, bilirubin direk, dan bilirubin indirek ( $p > 0,05$ ). Kesimpulan dari penelitian ini adalah asiatikosida dosis 5, 10, dan 20 mg/kgBB pada ekstrak semanggi gunung tidak dapat memberikan pengaruh berupa penurunan kadar ALT, AST, bilirubin total, bilirubin direk, dan bilirubin indirek.

Kata kunci: ALP, ALT, AST, bilirubin, *Hydrocotyle sibthorpioides* Lam.



## ABSTRACT

Miladewi, Ketut Ayu. 2015. Influence of *Hydrocotyle sibthorpioides* Lam. Extract to ALT, AST, ALP, and Bilirubin Level in Male Wistar Rats which Induced Antituberculosis Drugs (Extraction Using 70% Ethanol). Final Assignment, Pharmacy Department of Medical Faculty, University of Brawijaya. Supervisor: (1) Dra. Siti Jazimah Iswarin, M.Si., Apt. (2) Adeltrudis Adelsa D., S.Farm., M.Farm.Klin., Apt.

Isoniazid, rifampin and pirazinamid are included in drugs that cause *Drug Induced Liver Injury* (DILI) because they can result hepatotoxic with signs like increasing the level of ALT, AST, ALP, and bilirubin. Asiaticoside in mountain clover (*Hydrocotyle sibthorpioides* Lam.) could act as hepatoprotector because of its property as antioxidant. The aim of this study is to understand the effects of giving mountain clover extract which contain asiaticoside in dosage of 5, 10, and 20 mg/kgBW/day to the level of AST, ALT, ALP, and bilirubin. This experimental study uses post test only control group design to 25 male Wistar rats. Sample is chosen using simple random sampling to be divided into five groups, which are: group I = placebo, group II = control negative, group III = dosage of 5mg/kgBW/day, group IV = dosage of 10mg/kgBW/day, and group V = dosage of 20mg/kgBW/day. The results of this study showed that there is no significant influence of given extract with dosage of 5, 10, and 20 mg/kgBW/day to the decreasing of ALT, AST, total bilirubin, direct bilirubin, and indirect bilirubin level ( $p > 0.05$ ). The conclusion of this study is asiaticoside in dosage of 5, 10, and 20 mg/kgBW/day in *Hydrocotyle sibthorpioides* Lam extract could not give influence to decrease ALT, AST, total bilirubin, direct bilirubin, and indirect bilirubin level.

Keywords: ALP, ALT, AST, bilirubin, *Hydrocotyle sibthorpioides* Lam.

