

ABSTRAK

Latar Belakang: Ibuprofen merupakan obat antiinflamasi nonsteroid (OAINS) yang banyak digunakan, namun penggunaan jangka panjang dapat menimbulkan hepatotoksisitas. *Clitoria ternatea*, atau disebut juga bunga telang, kaya akan antosianin dengan sifat antioksidan dan antiinflamasi sehingga berpotensi sebagai hepatoprotektor. **Tujuan:** Mengetahui pengaruh ekstrak bunga *Clitoria ternatea* terhadap fungsi hati pada tikus Wistar yang dipapar ibuprofen. **Metode:** Penelitian *in vivo* ini menggunakan 30 ekor tikus Wistar jantan yang dibagi menjadi lima kelompok: kontrol normal, kontrol negatif (ibuprofen saja), serta tiga kelompok perlakuan yang mendapat ekstrak *C. ternatea* dengan dosis 250, 500, dan 1000 mg/kg BB. Semua kelompok kecuali kontrol normal dipapar ibuprofen 44 mg/kg BB untuk menginduksi stres pada hati. Kadar SGPT dan SGOT diukur, kemudian dianalisis menggunakan uji Kruskal-Wallis. **Hasil:** Uji statistik menunjukkan tidak terdapat perbedaan bermakna pada kadar SGPT dan SGOT antar kelompok ($p_{SGPT}=0,266$; $p_{SGOT}=0,151$). Nilai rerata kadar SGPT;SGOT berturut-turut adalah: kontrol normal (67,6;113,5), kontrol negatif (128,4;214,4), P1 (63,2;121), P2 (65,7;108,5), P3 (56,9;107,3). Meskipun ekstrak mengandung antosianin tinggi (750,30 mg/100 g), tidak ditemukan efek signifikan, kemungkinan karena dosis ibuprofen yang kurang, durasi paparan singkat, serta bioavailabilitas dari ekstrak *C. ternatea*. **Kesimpulan:** Ekstrak *Clitoria ternatea* menunjukkan potensi agen protektif melalui aktivitas antioksidan, namun tidak memberikan perbaikan yang signifikan.

Kata kunci: *Clitoria ternatea*, Ibuprofen, SGPT, SGOT, Tikus Wistar

ABSTRACT

Background: Ibuprofen is a widely used nonsteroidal anti-inflammatory drug (NSAID) that may cause hepatotoxicity with prolonged administration. *Clitoria ternatea* (butterfly pea), which is rich in anthocyanins with antioxidant and anti-inflammatory properties, has been proposed to exert hepatoprotective effects. **Aim:** This study aimed to evaluate the effect of *Clitoria ternatea* flower extract on liver function in Wistar rats exposed to ibuprofen. **Methods:** An in vivo experimental study was conducted using 30 male Wistar rats, which were randomly assigned to five groups: a normal control group, a negative control group (ibuprofen only), and three treatment groups receiving *Clitoria ternatea* extract at doses of 250, 500, and 1000 mg/kg. All groups, except the normal control group, were administered ibuprofen at a dosage of 44 mg/kg body weight to induce liver stress. Serum SGPT and SGOT levels were measured, and data were analyzed using the Kruskal-Wallis to determine significant differences among the groups. **Results:** Statistical analysis indicated no significant differences in SGPT and SGOT levels among the groups ($p_{SGPT} = 0.266$; $p_{SGOT} = 0.151$). The mean SGPT; SGOT values were as follows: normal control (67.5; 113.5), negative control (59.7; 109.8), P1 (63.1; 121), P2 (65.6; 108), and P3 (56.9; 107.3). Although the extract contained a high concentration of anthocyanins (750.30 mg/100 g), no significant hepatoprotective effect was observed, likely due to the relatively low ibuprofen dose, short exposure period, and bioavailability of the extract. **Conclusions:** The study did not find significant effects of *Clitoria ternatea* extract in Wistar rats subjected to ibuprofen treatment.

Key Words: *Clitoria ternatea*, Ibuprofen, SGPT, SGOT, Wistar rats