UJI EFEKTIVITAS EKSTRAK ETANOL DAUN PETAI CINA *(Leucaenaleucocephala L.)* TERHADAP PENURUNAN KADAR KOLESTEROL MENCIT YANG DIINDUKSI PROPYLTHIOURACIL

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ABSTRAK

Latar belakang: Hiperkolesterolemia merupakan salah satu faktor risiko penyakit kardiovaskular. Daun petai cina (*Leucaena leucocephala* L.) mengandung flavonoid, alkaloid, tanin, dan saponin yang berpotensi menurunkan kadar kolesterol. **Tujuan:** Mengetahui efektivitas ekstrak etanol daun petai cina terhadap penurunan kadar kolesterol mencit yang diinduksi *Propylthiouracil* (PTU). **Metode:** Penelitian eksperimental menggunakan 25 ekor mencit jantan yang dibagi menjadi lima kelompok, yaitu kontrol negatif, kontrol positif simvastatin, serta kelompok ekstrak dosis 100, 200, dan 300 mg/kgBB. Mencit diinduksi PTU selama 7 hari dan diberikan perlakuan selama 14 hari. Kadar kolesterol diukur sebelum dan sesudah perlakuan. **Hasil:** Ekstrak etanol daun petai cina menurunkan kadar kolesterol pada semua dosis, yaitu sebesar 16,00 mg/dL (11,41%) pada dosis 100 mg/kgBB, 25,00 mg/dL (18,03%) pada dosis 200 mg/kgBB, dan 37,00 mg/dL (24,21%) pada dosis 300 mg/kgBB. Penurunan terbesar terdapat pada dosis 300 mg/kgBB. **Kesimpulan:** Ekstrak etanol daun petai cina efektif menurunkan kadar kolesterol mencit yang diinduksi PTU. Dosis 300 mg/kgBB menunjukkan penurunan kadar kolesterol terbesar, yaitu sebesar 37,00 mg/dL (24,21%), dan hasil uji statistik menunjukkan bahwa penurunan kadar kolesterol pada dosis 300 mg/kgBB tidak berbeda nyata dengan kontrol positif simvastatin ($p = 0,05$)**.**

Kata kunci: Hiperkolesterolemia, daun petai cina, ekstrak etanol, kolesterol, mencit.

EFFICACY TEST OF ETHANOL EXTRACT OF RIVER TAMARIND (Leucaena Leucocephala L.) LEAVES ON CHOLESTEROL LEVEL REDUCTION IN PROPYLTHIOURACILINDUCED MICE

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ABSTRACT

Background: *Hypercholesterolemia is one of the risk factors for cardiovascular disease. Chinese petai leaves* (*Leucaena leucocephala* L.) *contain flavonoids, alkaloids, tannins, and saponins that have the potential to reduce cholesterol levels.* ***Objective:*** *To determine the effectiveness of ethanol extract of Chinese petai leaves in reducing cholesterol levels in mice induced by Propylthiouracil (PTU).* ***Methods:*** *This experimental study used 25 male mice divided into five groups: negative control, positive control with simvastatin, and extract groups at doses of 100, 200, and 300 mg/kgBB. The mice were induced with PTU for 7 days and treated for 14 days. Cholesterol levels were measured before and after treatment.* ***Results:*** *Ethanol extract of Chinese petai leaves reduced cholesterol levels at all doses, by 16.00 mg/dL (11.41%) at 100 mg/kgBB, 25.00 mg/dL (18.03%) at 200 mg/kgBB, and 37.00 mg/dL (24.21%) at 300 mg/kgBB. The greatest reduction was observed at the dose of 300 mg/kgBB.* ***Conclusion:*** *The ethanol extract of Chinese petai leaves was effective in reducing cholesterol levels in PTU-induced mice. The dose of 300 mg/kgBW showed the greatest reduction in cholesterol levels, amounting to 37.00 mg/dL (24.21%), and statistical analysis showed that the reduction in cholesterol levels at the dose of 300 mg/kgBW was not significantly different from the positive control group treated with simvastatin (p = 0.05).*

Keywords: *Hypercholesterolemia, Chinese petai leaves, ethanol extract, cholesterol, mice.*