

**UJI AKTIVITAS FORMULASI MIKROKAPSUL EKSTRAK
ETANOL HERBA SIRIH CINA (*Peperomia pellucida L.*) SEBAGAI
ANTIDISLIPIDEMIA TERHADAP TIKUS PUTIH**

Abstrak

Dislipidemia merupakan gangguan metabolisme lipid yang ditandai dengan peningkatan atau penurunan kadar lemak dalam plasma darah. Kelainan ini mencakup tingginya kadar kolesterol total, LDL, trigliserida, serta penurunan HDL. Dislipidemia terbagi menjadi dua jenis, yakni primer (faktor genetik) dan sekunder (akibat penyakit lain). Dalam penelitian ini, tikus putih betina diinduksi dengan pakan tinggi lemak lalu dibagi menjadi enam kelompok: kontrol negatif, kontrol positif (simvastatin 0,36 mL/hari), serta tiga kelompok perlakuan dengan mikrokapsul ekstrak etanol herba sirih cina (EEHSC) pada konsentrasi 0,25%, 0,5%, dan 0,75%. Perlakuan diberikan secara oral selama 14 hari. Pengukuran kadar kolesterol dilakukan sebelum dan sesudah perlakuan menggunakan alat uji kolesterol digital dan analisis laboratorium. Hasil menunjukkan penurunan kadar kolesterol sebagai berikut: kontrol negatif 24,8%, kontrol positif 36,1%, EEHSC 0,25% sebesar 24,1%, EEHSC 0,5% sebesar 34,7%, dan EEHSC 0,75% sebesar 45,5%. Perlakuan EEHSC konsentrasi 0,5% menghasilkan penurunan kolesterol yang hampir sebanding dengan simvastatin, sedangkan konsentrasi 0,75% menunjukkan efektivitas tertinggi. Sebaliknya, konsentrasi 0,25% memberikan efek yang kurang optimal.

Kata Kunci : Dislipidemia, Kolesterol, Mikrokapsul Ekstrak Etanol Herba Sirih Cina, Persentase Penurunan

**ACTIVITY TEST OF MICROCAPSULES SERVICE OF ETANOL
EXTRACT OF HERBA SIRIH CINA (*Peperomia pellucida* L.) AS
ANTIDISLIPIDEMIA AGAINST WHITE RATS**

Abstract

Dyslipidemia is a disorder of lipid metabolism characterized by increased or decreased levels of fats in the blood plasma. This disorder includes high levels of total cholesterol, LDL, triglycerides, and decreased HDL. Dyslipidemia is divided into two types, namely primary (genetic factors) and secondary (due to other diseases). In this study, female white rats were induced with high-fat feed and then divided into six groups: negative control, positive control (simvastatin 0.36 mL/day), and three treatment groups with microcapsules of ethanol extract of Chinese betel herb (EEHSC) at concentrations of 0.25%, 0.5%, and 0.75%. The treatments were given orally for 14 days. Cholesterol levels were measured before and after treatment using a digital cholesterol test kit and laboratory analysis. The results showed a decrease in cholesterol levels as follows: negative control 24.8%, positive control 36.1%, EEHSC 0.25% by 24.1%, EEHSC 0.5% by 34.7%, and EEHSC 0.75% by 45.5%. EEHSC treatment of 0.5% concentration resulted in almost comparable cholesterol reduction with simvastatin, while 0.75% concentration showed the highest effectiveness. In contrast, the 0.25% concentration gave a less optimal effect.

Keywords : *Dyslipidemia, Cholestrol, Microcapsules of Ethanol Extract of Chinese Betel Herba, Percentage Reduction*