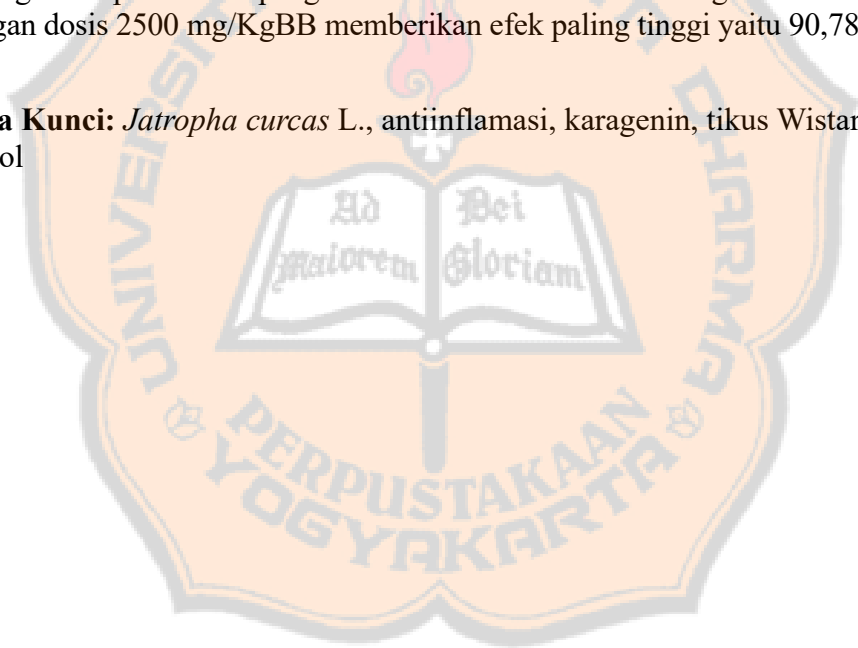


ABSTRAK

Penelitian ini bertujuan untuk mengetahui efek antiinflamasi ekstrak etanol daun jarak pagar (*Jatropha curcas* L.) pada tikus putih jantan yang diinduksi karagenin 1%. Simplisia daun jarak pagar diekstraksi menggunakan metode maserasi dengan pelarut etanol 70%. Penelitian ini merupakan penelitian eksperimental murni menggunakan rancangan acak lengkap pola searah dengan lima kelompok perlakuan, yaitu kontrol negatif (CMC-Na 1%), kontrol positif (kalium diklofenak 6,3 mg/kgBB), dan kelompok perlakuan ekstrak etanol daun jarak pagar dengan dosis 625; 1250; 2500 mg/KgBB yang diberikan secara per oral. Setelah 60 menit pemberian ekstrak tersebut, induksi karagenin 1% dilakukan secara subplantar pada telapak kaki kiri. Pengukuran tebal edema dilakukan setiap 60 menit selama 6 jam menggunakan jangka sorong. Data selisih tebal edema digunakan untuk menghitung AUC_{0-6} dan persentase penghambatan inflamasi. Analisis statistik mencakup uji *Shapiro-Wilk* (normalitas), uji *Levene* (homogenitas), *One-Way ANOVA*, dilanjutkan dengan uji *Post-Hoc Bonferroni*. Hasil penelitian menunjukkan bahwa ekstrak etanol daun jarak pagar (*Jatropha curcas* L.) memiliki aktivitas antiinflamasi dengan penurunan nilai AUC dan peningkatan persentase penghambatan inflamasi dibandingkan kontrol negatif, dengan dosis 2500 mg/KgBB memberikan efek paling tinggi yaitu $90,78 \pm 2,64\%$.

Kata Kunci: *Jatropha curcas* L., antiinflamasi, karagenin, tikus Wistar, ekstrak etanol



ABSTRACT

This study aimed to determine the anti-inflammatory effect of the ethanol extract of *Jatropha curcas* L. leaves in male white rats induced by 1% carrageenan. The *Jatropha curcas* leaves were extracted using the maceration method with 70% ethanol as the solvent. This study was a true experimental study using a completely randomized one-way design with five groups, namely a negative control (1% CMC-Na), a positive control (diclofenac potassium 6.3 mg/kg body weight), and three treatment groups receiving ethanolic extract of *Jatropha curcas* L. leaves at doses of 625, 1250, and 2500 mg/kg body weight administered orally. After 60 minutes of administration, inflammation was induced by subplantar injection of 1% carrageenan into the left hind paw. Edema thickness was measured every 60 minutes for 6 hours using a caliper. The edema difference data were used to calculate AUC_{0-6} and the percentage of inflammation inhibition. Statistical analysis included the Shapiro-Wilk test (normality), Levene's test (homogeneity), One-Way ANOVA, followed by *Post-Hoc Bonferroni*. The results showed that the ethanolic extract of *Jatropha curcas* L. leaves exhibited anti-inflammatory activity, indicated by a decrease in AUC values and an increase in the percentage of inflammation inhibition compared to the negative control, with the highest effect observed at a dose of 2500 mg/kg body weight, namely $90.78 \pm 2.64\%$.

Keywords: *Jatropha curcas* L., anti-inflammatory, carrageenan, Wistar rats, ethanolic extract

