UJI AKTIVITAS ANTIINFLAMASI EKSTRAK ETANOL DAUN KENCANA UNGU *(Ruellia tuberosa* L.*)* TERHADAP MENCIT JANTAN (*Mus musculus*)

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ABSTRAK

Inflamasi merupakan respons tubuh terhadap cedera atau iritasi yang ditandai dengan terjadinya pembengkakan. Daun kencana ungu (*Ruellia tuberosa* L.) mengandung metabolit sekunder yang berpotensi sebagai antiinflamasi. Penelitian ini bertujuan untuk mengetahui aktivitas antiinflamasi ekstrak etanol daun kencana ungu dan pengaruh variasi dosis terhadap penghambatan radang pada mencit jantan. Penelitian dilakukan secara eksperimental menggunakan 25 ekor mencit jantan yang dibagi menjadi lima kelompok, yaitu kontrol negatif Na CMC 1%, kontrol positif natrium diklofenak, serta kelompok ekstrak dosis 14, 28, dan 42 mg/kgBB. Inflamasi diinduksi dengan karagenan 1% sebanyak 0,1 mL secara intraplantar dan diameter edema diukur menggunakan jangka sorong selama enam jam. Hasil penelitian menunjukkan bahwa persentase inhibisi radang pada dosis 14, 28, dan 42 mg/kgBB pada jam ke-6 masing-masing sebesar 42,21%, 89,17%, dan 95,41%, sedangkan natrium diklofenak sebesar 86,95%. Hasil uji One-Way ANOVA menunjukkan adanya perbedaan bermakna antar kelompok perlakuan mulai jam ke-1 hingga jam ke-6 ($p < 0,05$). Uji Tukey HSD pada jam ke-6 menunjukkan bahwa dosis 28 dan 42 mg/kgBB berbeda bermakna dengan kontrol negatif, tetapi tidak berbeda bermakna dengan natrium diklofenak. Berdasarkan hasil penelitian, ekstrak etanol daun kencana ungu menunjukkan aktivitas antiinflamasi pada mencit jantan. Dosis 42 mg/kgBB menunjukkan persentase inhibisi radang tertinggi secara deskriptif sebesar 95,41%.

Kata Kunci : Antiinflamasi, *Ruellia tuberosa* L., Ekstrak Etanol, Natrium Diklofenak, Karagenan

EVALUATION OF THE ANTI-INFLAMMATORY ACTIVITY OF ETHANOL EXTRACT OF KENCANA UNGU LEAVES (*Ruellia tuberosa* L.) IN MALE MICE (*Mus musculus*)

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ABSTRACT

Inflammation is a bodily response to injury or irritation characterized by swelling. Kencana ungu leaves (Ruellia tuberosa L.*) contain secondary metabolites that have potential anti-inflammatory activity. This study aimed to determine the anti-inflammatory activity of ethanol extract of kencana ungu leaves and the effect of dose variations on inflammation inhibition in male mice. The study was conducted experimentally using 25 male mice divided into five groups: a 1% Na CMC negative control group, a sodium diclofenac positive control group, and extract groups receiving doses of 14, 28, and 42 mg/kgBW. Inflammation was induced using 1% carrageenan at a dose of 0.1 mL administered intraplantarly, and paw edema diameter was measured using a caliper for six hours. The results showed that the percentages of inflammation inhibition at doses of 14, 28, and 42 mg/kgBW at the sixth hour were 42.21%, 89.17%, and 95.41%, respectively, while sodium diclofenac showed 86.95% inhibition. One-Way ANOVA showed significant differences among treatment groups from the first to the sixth hour ($p < 0.05$). Tukey HSD test at the sixth hour showed that the 28 and 42 mg/kgBW doses were significantly different from the negative control but were not significantly different from sodium diclofenac. Based on the results, the ethanol extract of kencana ungu leaves showed anti-inflammatory activity in male mice. The 42 mg/kgBW dose showed the highest inhibition percentage descriptively at 95.41%.*

Keywords : *Anti-inflammatory*, *Ruellia tuberosa L., Ethanol Extract, Sodium Diclofenac, Carrageenan.*