

## ABSTRAK

Tujuan penelitian ini adalah untuk mengetahui efek antiinflamasi topikal, konsentrasi optimum, dan persen penghambatan inflamasi dari ekstrak etanol daun jambu biji pada mencit betina galur Swiss terinduksi karagenin. Metode yang digunakan adalah *Inflammation-assosiated oedema* dengan mengukur tebal lipat kulit punggung mencit. Penelitian ini termasuk dalam eksperimental murni rancangan acak lengkap pola searah. Dua puluh lima hewan uji dibagi menjadi 5 kelompok perlakuan, yaitu kelompok kontrol negatif karagenin 3%, kelompok kontrol Biocream®, kelompok ekstrak etanol daun jambu biji 5; 10 dan 15% <sup>b/b</sup>.

Semua hewan uji diberi injeksi 0,1 ml karagenin 3% kemudian dioleskan senyawa uji. Tebal lipat kulit punggung mencit diukur tiap jam selama 6 jam menggunakan jangka sorong digital kemudian dihitung selisih tebal lipat kulit punggung mencit, nilai AUC dan persen penghambatan inflamasi. Analisis data menggunakan uji *Shapiro-Wilk* dilanjutkan dengan uji *One Way ANOVA* dan uji *Post Hoc Tukey HSD* dengan taraf kepercayaan 95%. Hasil penelitian menunjukkan bahwa ekstrak etanol daun jambu biji memiliki aktivitas antiinflamasi topikal dengan konsentrasi optimum 15%. Persen penghambatan inflamasi dari ekstrak etanol daun jambu biji pada konsentrasi 5; 10; dan 15% berturut-turut adalah 42,91; 54,80; dan 70,46%.

Kata kunci : antiinflamasi, ekstrak etanol, daun jambu biji (*Psidium guajava Linn.*).

## ABSTRACT

The research aimed to investigate topical anti-inflammatory effect, optimum concentration, and find out the percent inhibition of inflammation from ethanol extract of guava leaves in Swiss galur mice skin induced by carrageenan. The method used is inflammation-associated oedema. This research was purely experimental with randomized complete direct sampling design. Twenty five mice were divided into five groups, negative control group (carrageenan 3%), Biocream® control group, and group of ethanol extract of guava leaves with a concentration 5; 10; and 15%  $b/b$ . The tested substance will be applied after animals was induced 0,1 ml of carrageenan 3%. Edema thickness of mice was measured every hour for 6 hours used digital caliper and then calculated the difference in edema thickness of each mice, AUC, and percent inhibition of inflammation. Data were analyzed using the Shapiro-Wilk test continued with One Way ANOVA test and Post Hoc Tukey HSD test with 95% confidance. The result of this research showed that ethanol extract of guava leaves has topical anti-inflammatory effect with optimum concentration 15%. Percent inhibition of inflammation ethanol extract of guava leaves at concentration 5; 10; and 15% were 42.91; 54.80; and 70.46% respectively.

Keyword : anti-inflammatory, ethanol extract, guava leaves (*Psidium guajava* Linn.).