

INTISARI

YOLANDA, MK., 2020, UJI ANTIINFLAMASI TOPIKAL EKSTRAK ETANOL DAUN ILER (*Plectranthus scutellarioides* Linn R.Br) TERHADAP EDEMA DAN JUMLAH NEUTROFIL MENCIT DIINDUKSI KARAGENAN, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Inflamasi merupakan respon normal pertahanan tubuh terhadap trauma fisik, zat kimia berbahaya atau agen mikrobiologi, dengan respon berupa rubor, kalor, dolor, dan tumor. Tanaman *Plectranthus scutellarioides* (L.) R.Br atau iler diketahui sebagai antiinflamasi akut maupun kronis. Tujuan dari penelitian ini yaitu untuk menguji efek antiinflamasi sediaan topikal, mengukur persen penghambatan inflamasi (%PI) serta studi literatur (*Literature review*) penurunan jumlah neutrofil oleh ekstrak etanol daun iler sebagai agen antiinflamasi.

Penelitian ini termasuk dalam eksperimental dan studi literatur (*Literature review*) pada penelitian ekperimental dilakukan pada 25 ekor terbagi dalam 5 kelompok, yaitu kontrol negatif (Biocream®), kontrol positif Na.diklofenak 1% (Flamar®), dan kelompok perlakuan krim ekstrak daun iler 1,67; 2,5; dan 3,75% b/b. Metode yang digunakan adalah induksi karagenan dan metode literatur, lalu data tebal lipatan edema kulit dianalisis menggunakan uji Shapiro-Wilk dilanjutkan dengan analisis *One Way anova* dan *Post hoc Tukey HSD*.

Persen penghambatan inflamasi (%PI) ekstrak etanol daun iler konsentrasi 1,67; 2,5; dan 3,75% berturut-turut adalah 3,90; 13,90; dan 29,29%. Konsentrasi paling efektif adalah 3,75% karena sebanding dengan kontrol positif 43,59%. Hasil studi literatur, iler dapat menurunkan jumlah sel neutrofil segmen dan batang pada cairan eksudat dengan nilai $p < 0,05$. Hasil penelitian dan studi literatur menunjukkan ekstrak etanol daun iler memiliki efek antiinflamasi topikal terhadap edema kulit punggung mencit yang diinduksi karagenan.

Kata kunci : inflamasi, daun *Plectranthus scutellarioides* (L.) R.Br, karagenan, edema, neutrofil

ABSTRACT

YOLANDA, MK., 2020, TOPICAL ANTI INFLAMMATION TEST OF ETHANOL EXTRACT OF LEAF ILER (*Plectranthus scutellarioides* Linn R.Br) ON EDEMA AND AMOUNT OF NEUTROPHILS INDICATED CARRAGEENAN, Scription, Faculty of Pharmacy, UNIVERSITY OF SETIA BUDI, SURAKARTA

Inflammation is the body's normal defense response to physical trauma, harmful chemicals, or microbiological agents, with responses in the form of rubles, heat, dolor, and tumors. *Plectranthus scutellarioides* (L.) R.Br or iler plants are known as acute and chronic anti-inflammatory. The purpose of this study is to examine the anti-inflammatory effects of topical preparations, measure the percent of inflammatory inhibition (% PI) as well as a literature study (Literature review) of the decrease in the number of neutrophils by ether extract of iler leaves as an anti-inflammatory agent.

This study was included in the experimental and literature study (Literature review) in an experimental study conducted on 25 tails divided into 5 groups, namely the negative control group (Biocream®), the positive control group Na.diklofenak 1% (Flamar®), and the cream treatment group iler leaf extract 1.67; 2.5; and 3.75% b / b. This test was used the carrageenan induction method and literature method and data thickness of skin edema folds was analyzed using the Shapiro-Wilk test followed by One Way ANOVA analysis and Post hoc Tukey HSD.

Percent of inflammatory inhibition (% PI) ethanol extract of iler leaf concentration 1.67; 2.5; and 3.75% is 3.90; 13.90; and 29.29%, respectively. The concentration of 3.75% as the largest topical anti-inflammatory. The results of the literature study, iler effect reduced the number of neutrophil cells and stem segments in exudate fluid with a value of $p < 0.05$. The results of research and literature studied show that ethanol extract of iler leaf had a topical anti-inflammatory effect on the edema of carrageenan-induced back skin of mice.

Keywords: inflammation, leaves of *Plectranthus scutellarioides* (L.) R.Br, carrageenan, edema, neutrophils