

ABSTRAK

SINTA, JESSICA N., 2021. FORMULASI SEDIAN KRIM EKSTRAK DAUN KACANG TUJUH JURAI (*Phaseolus lunatus L.*) DENGAN PENGUJIAN AKTIVITASNYA SEBAGAI ANTI INFLAMASI TOPIKAL PADA TIKUS. SKRIPSI. PROGRAM STUDI S1 FARMASI. FAKULTAS FARMASI. UNIVERSITAS SETIA BUDI SURAKARTA. Dibimbing oleh Dr. apt. Tri Wijayanti, S.Farm., M.P.H. dan apt. Siti Aisiyah, M.Sc.

Daun kacang tujuh jurai (*Phaseolus lunatus L.*) diketahui mengandung flavonoid, saponin dan polifenol. Penelitian ini bertujuan untuk membuktikan bahwa ekstrak etanol daun kacang tujuh jurai (EEDKTJ) dapat dibuat menjadi formula sediaan krim tipe M/A dan memiliki aktivitas antiinflamasi secara topikal dilihat dari penurunan tebal edema yang diinduksi karagenan 3%.

Daun kacang tujuh jurai diekstraksi menggunakan metode maserasi menggunakan etanol 70% dan dibuat sediaan krim variasi konsentrasi ekstrak 10 ; 15 ; 20%. Sediaan krim di uji mutu fisik meliputi uji organoleptis, homogenitas, tipe emulsi, uji pH, uji daya lekat, uji daya sebar, viskositas dan *cycling test*. Aktivitas antiinflamasi sediaan krim dianalisis dengan metode *inflammation associates oedema* yaitu mengukur efek antiinflamasi menggunakan jangka sorong menggunakan 25 hewan uji dibagi 5 kelompok yaitu kontrol negatif, kontrol positif, dan kelompok EEDKTJ konsentrasi 10 ; 15 ; dan 20% masing-masing berjumlah 5 ekor. Hasil dari beberapa pengujian yang telah dilakukan dianalisis menggunakan program SPSS.

Hasil uji aktivitas antiinflamasi daun kacang tujuh jurai yang menunjukkan perbedaan tidak bermakna pada kontrol positif adalah EEDKTJ 20%. Ekstrak dibuat menjadi sediaan krim dengan mutu fisik serta stabil pada organoleptik, tipe emulsi. Formula yang memberikan aktivitas antiinflamasi paling kuat adalah konsentrasi ekstrak 20%.

Kata kunci : ekstrak etanol 70%, (*Phaseolus lunatus L.*), krim, aktivitas antiinflamasi.

ABSTRACT

SINTA, JESSICA N., 2021. THE FORMULATION OF A CREAM FROM SEVEN JURAI BEAN LEAVES (*Phaseolus lunatus L*) EXTRACT WITH TOPICAL ANTI-INFLAMMATORY ACTIVITY TEST ON RATS. THESIS, BACHELOR OF PHARMACY, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA. Supervised by Dr. apt. Tri Wijayanti, S.Farm., M.P.H. and apt. Siti Aisiyah, M.Sc.

Seven jurai peanut leaves (*Phaseolus lunatus L.*) are known to contain flavonoids, saponins and polyphenols. This study aims to prove that the ethanol extract of seven jurai nuts leaves (EEDKTJ) can be made into a cream formulation of type O/A and has anti-inflammatory activity topically as seen from the reduction in thickness of edema induced by carrageenan 3%.

Seven jurai peanut leaves were extracted using the maceration method using 70% ethanol and cream preparations were made with variations in the concentration of the extract 10; 15 ; 20%. The cream preparations were tested for physical quality including organoleptic test, homogeneity, emulsion type, pH test, adhesion test, spreadability test, viscosity and cycling test. The anti-inflammatory activity of the cream preparation was analyzed using the inflammation associates edema method, namely measuring the anti-inflammatory effect using a caliper using 25 test animals divided into 5 groups, namely negative kontrol, positive kontrol, and the EEDKTJ group with a concentration of 10; 15 ; and 20% each amounted to 5 tails. The results of several tests that have been carried out were analyzed using the SPSS program.

The results of the anti-inflammatory activity of seven jurai peanut leaves which showed no significant difference in the positive kontrol was EEDKTJ 20%. The extract was made into a cream preparation with physical quality and was stable in organoleptic, emulsion type. The formula that gave the strongest anti-inflammatory activity was the extract concentration of 20%.

Keywords: 70% ethanol extract, (*Phaseolus lunatus L.*), cream, anti-inflammatory activity