

ABSTRAK

Nama : Dinda Nabilah Pramestiti

Program Studi : Farmasi

Judul : **FORMULASI PLESTER GEL TRANSDERMAL**

ANTIINFLAMASI EKSTRAK KENTAL ETANOL DAUN SINGKONG

(*Manihot esculenta*) DENGAN BASIS KARBOMER 940

Daun singkong selain digunakan sebagai sumber pangan juga memiliki efek antiinflamasi mengurangi diameter edema telapak kaki mencit. Telah dilakukan penelitian tentang formulasi plester gel transdermal ekstrak kental etanol daun singkong (*Manihot esculenta*) dan uji efektivitas terhadap edema telapak kaki mencit. Penelitian dilakukan dengan cara membuat ekstrak kental etanol daun singkong secara maserasi menggunakan etanol 70%, maserat diuapkan di *rotary evaporator* pada suhu 40°C, kemudian dievaluasi. Plester gel transdermal yang mengandung ekstrak kental daun singkong dibuat dengan empat variasi konsentrasi yaitu 0%, 2%, 4% dan 8%. Evaluasi yang dilakukan terhadap plester gel transdermal antara lain : organoleptik, viskositas, pH, homogenitas, keseragaman bobot, ketahanan lipat, ketebalan, dan uji efektivitas. Uji antiinflamasi dilakukan dengan metode penurunan edema menggunakan 27 mencit (*Mus musculus*) jantan. Plester gel transdermal yang dibuat berbentuk padat, berwarna hijau muda sampai hijau pekat, berbau khas daun singkong, viskositas antara 6333 – 9067 cps, memiliki pH 5 sesuai pH kulit, homogen, bobot sekitar 0.40 – 0.41 g, memiliki ketahanan lipat 126 – 128 kali dan ketebalan plester antara 1.07 – 1.10 mm. Efek antiinflamasi tertinggi dihasilkan oleh plester gel transdermal ekstrak kental etanol daun singkong konsentrasi 8% dengan penurunan edema 2.32% pada kaki mencit jantan.

Kata kunci:

Daun singkong (*Manihot esculenta*), Plester gel transdermal, Antiinflamasi

ABSTRACT

Name : Dinda Nabilah Pramestiti
Study Program : Farmasi
Title : ANTI-INFLAMMATORY TRANSDERMAL GEL
PLESTER FORMULATION OF CASSAVA LEAF ETHANOL EXTRACT
(*Manihot esculenta*) WITH GELLING AGENT CARBOMER 940

A part from being used as a food source, cassava leaves also have anti-inflammatory effects by decrease diameter of edema in feet male mice. A study of anti-inflammatory transdermal gel plester formulation of cassava leaves (*Manihot esculenta*) and effectiveness test by decrease diameter of edema in feet male mice. The research was conducted by making extract of cassava leaf using ethanol 70%, macerate was evaporated in the rotary evaporator at 40°C, then evaluated. Transdermal gel plester containing thick extracts of cassava leaves was made with four variations of concentration 0%, 2%, 4% and 8%. Evaluations carried out on transdermal gel plester include : organoleptic, viscosity, pH, homogeneity, uniformity of weights, folding resistance, thickness, and anti-inflammatory test. The anti-inflammatory test was carried out by the method of decreasing edema using 27 male mice (*Mus musculus*). Transdermal gel plester has the characteristic of solid plester, green and dark green fragrant of cassava leaf, viscosity between 6333 – 9067 cps, pH 5 according to skin pH, homogeneous, weight between 0.40 – 0.41 g, folding resistance between 126 – 128 times, and thickness between 1.07 – 1.10 mm. The highest anti-inflammatory effect was produced by extract of cassava leaf with concentrations 8% as indicated by the decrease of the edema 2.32% in the feet male mice.

Keywords :
Cassava leaf (*Manihot esculenta*), Transdermal gel plester, Anti-inflammatory