

INTISARI

Zuhro' AF, 2022, FORMULASI, UJI MUTU FISIK SEDIAAN HAIR TONIC DAN UJI AKTIVITAS PERTUMBUHAN RAMBUT EKSTRAK DAUNKEMBANG SEPATU (*Hibiscus rosa-sinensis* L) PADA RAMBUT KELINCI NEW ZEALAND WHITE. SKRIPSI, FAKULTAS FARMASI. UNIVERSITAS SETIA BUDI. SURAKARTA.

Dibimbing oleh Dr. apt. Opstaria Saptarini, M.Si dan apt. Muhammad Dzakwan, M.Si.

Daun kembang sepatu merupakan tanaman yang bisa dimanfaatkan untuk pemulih rambut. Daun kembang sepatu membantu kesehatan rambut karena memiliki kandungan senyawa flavonoid, alkaloid, saponin, tanin. Tujuan dari penelitian ini ialah untuk mengetahui pengaruh variasi konsentrasi propilen glikol terhadap mutu fisik sediaan *hair tonic* dan pertumbuhan rambut kelinci.

Ekstrak etanol daun kembang sepatu diperoleh dengan metode maserasi menggunakan etanol 70%. Sediaan *hair tonic* dibuat dalam 4 formula dengan konsentrasi ekstrak daun kembang sepatu 10% dalam formula 1, 2, dan 3 mengandung ekstrak daun kembang sepatu 10% dengan konsentrasi propilen glikol sebesar 10%, 15%, dan 20%. Formula 4 merupakan kontrol negatif (tanpa zat aktif). *Hair tonic* dioleskan kepongung kelinci yang telah dicukur kemudian diberi sediaan *hair tonic* sehari 1 kali selama 21 hari. Parameter uji aktivitas pertumbuhan rambut kelinci dengan mengukur panjang rambut kelinci, serta melakukan uji mutu fisik sediaan yaitu organoleptis, pH, viskositas, dan bobot jenis. Data uji mutu fisik, panjang rambut, bobot rambut dianalisis dengan *Saphiro-Wilk*, kemudian menggunakan ANOVA dan *Post Hoc Tukey*.

Hasil penelitian menunjukkan bahwa sediaan *hair tonic* ekstrak daun kembang sepatu dengan konsentrasi propilen glikol 10%, 15%, dan 20% tidak mempengaruhi mutu fisik sediaan dan sediaan *hair tonic* ekstrak daun kembang sepatu dengan variasi propilen glikol memiliki aktivitas pertumbuhan rambut. Aktivitas pertumbuhan rambut pada formula 1, 2, dan 3 memiliki nilai hampir mirip yaitu 7,46 mm, 5,98 mm, dan 9,12 mm.

Kata kunci: *Hair tonic*, Daun Kembang Sepatu, Kelinci New Zealand

ABSTRACT

Zuhro' AF, 2022, FORMULATION, PHYSICAL QUALITY TEST OF HAIR TONIC PREPARATIONS AND HAIR GROWTH ACTIVITY TEST OF LEAF EXTRACT OF SHOE DEVELOPMENT (*Hibiscus rosa-sinensis* L) ON NEW ZEALAND WHITE RABBIT HAIR. THESIS, PHARMACY FACULTY, SETIA BUDI UNIVERSITY, SURAKARTA.

Supervised by Dr. apt. Opstaria Saptarini, M.Si and apt. Muhammad Dzakwan, M.Si.

Hibiscus leaves are plants that can accelerate hair growth. Hibiscus leaves contain flavonoid compounds, alkaloids, saponins, polyphenols that have the function of accelerating hair growth. This study aims to determine the effect of variations in propylene glycol concentration on the physical quality of *hair tonic* preparations and rabbit hair growth.

Ethanol extract of hibiscus leaves is obtained by maceration method using 70% ethanol. *Hair tonic* preparations are made in 4 formulas with a concentration of hibiscus leaf extract of 10% in formulas 1, 2, and 3 containing 10% hibiscus leaf extract with propylene glycol concentrations of 10%, 15%, and 20%. Formula 4 is a negative control (without active substances). Hair tonic is applied to the back of a rabbit that has been shaved and then given a hair tonic preparation a day 1 time in 21 days. The test parameters of rabbit hair growth activity by measuring the length of hair and weight of rabbit hair, as well as conducting physical quality tests of preparations, namely organoleptic, pH, viscosity, and specific gravity. Physical quality test data, hair length, hair weight were analyzed with Saphiro-Wilk, then using ANOVA and Post Hoc Tukey.

The results showed that the hair tonic preparation of hibiscus leaf extract with propylene glycol concentrations of 10%, 15%, and 20% affected the physical quality of the preparation. The higher the concentration of propylene glycol in hair tonic preparations affects the physical quality of the preparation and the hair tonic preparation of hibiscus leaf extract has hair growth activity. Hair growth activity in formulas 1, 2, and 3 had almost similar values, namely 7.46 mm, 5.98 mm and 9.12 mm.

Keywords: *Hair tonic*, Hibiscus leaves, a rabbit new zealand