

INTISARI

MUHAMMAD YUDA TRI PAMUNGKAS, 2023, FORMULASI & UJI AKTIVITAS HAIR TONIC EKSTRAK DAUN KECOMBRANG (*Etlingera elatior*) TERHADAP PERTUMBUHAN RAMBUT KELINCI *NEW ZEALAND WHITE*, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA. Dibimbing oleh apt. Dwi Ningsih, M.Si., dan apt. Nur Aini Dewi Purnamasari, M.Sc.,

Tanaman kecombrang mengandung zat aktif flavonoid, saponin, tanin, alkaloid yang diketahui memiliki efek meningkatkan pertumbuhan rambut, sehingga pada penelitian ini perlu dikembangkan sediaan *hair tonic* untuk meningkatkan efisiensi pemakaiannya. Penelitian ini bertujuan untuk mengetahui pengaruh variasi konsentrasi ekstrak daun kecombrang dalam sediaan *hair tonic* memenuhi syarat mutu fisik, stabilitas dan pengaruhnya pada pertumbuhan rambut kelinci serta formula yang paling baik.

Daun kecombrang diekstraksi dengan metode maserasi menggunakan etanol 96 %. Ekstrak etanol daun kecombrang di formulasi menjadi sediaan *hair tonic* dengan variasi konsentrasi formula 1 sebesar 7,5 %, formula 2 sebesar 10 % dan formula 3 sebesar 12,5 %. Sediaan *hair tonic* yang dihasilkan dilakukan uji mutu fisik meliputi organoleptis, pH, viskositas, bobot jenis, stabilitas dan uji kesukaan. Pengujian aktivitas sediaan *hair tonic* memakai uji eksperimental dengan hewan uji kelinci *New Zealand White*. *Hair tonic* diaplikasikan ke punggung kelinci satu kali sehari selama 21 hari dan diamati pertumbuhan rambutnya pada hari ke 7, 14 dan 21 menggunakan jangka sorong. Bobot rambut ditimbang pada hari ke 21. Data hasil uji mutu fisik, stabilitas, pengukuran rambut dan uji kesukaan dilakukan uji statistik.

Hasil penelitian menunjukkan bahwa sediaan *hair tonic* ekstrak daun kecombrang memenuhi mutu fisik dan stabilitas yang baik. Semakin tinggi konsentrasi ekstrak dalam sediaan *hair tonic* menghasilkan perbedaan aktivitas pertumbuhan rambut kelinci. Hasil dilihat dari parameter panjang rambut dan bobot rambut, namun belum bisa sebaik kontrol positif. Formula *hair tonic* yang memiliki hasil efektif terhadap pertumbuhan rambut kelinci yaitu formula 3. Formula sediaan *hair tonic* yang paling banyak disukai responden adalah formula 1.

Kata kunci : Kerontokan rambut, Daun kecombrang, *Hair Tonic*, Kelinci *New Zealand White*

ABSTRACT

MUHAMMAD YUDA TRI PAMUNGKAS, 2023, FORMULATION & TEST OF HAIR TONIC ACTIVITY OF KECOMBRANG LEAVES EXTRACT (*Etlingera elatior*) ON HAIR GROWTH OF NEW ZEALAND WHITE RABBITS, THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA. Supervised by apt. Dwi Ningsih, M.Si., and apt. Nur Aini Dewi Purnamasari, M.Sc.,

The combrang plant contains the active substances flavonoids, saponins, tannins, alkaloids which are known to have the effect of increasing hair growth, so in this research it is necessary to develop a hair tonic preparation to increase the efficiency of its use. In this research the formulation of combrang extract for hair growth in rabbits will be carried out.

Combrang leaves were extracted using the maceration method using 96% ethanol. The ethanol extract of kecombrang leaves was formulated into a hair tonic preparation with varying concentrations of formula 1 of 7.5%, formula 2 of 10% and formula 3 of 12.5%. The resulting hair tonic preparations were subjected to physical quality tests including organoleptic, pH, viscosity, specific gravity, stability and favorability tests. Testing the activity of hair tonic preparations used experimental tests with test animals, namely New Zealand White rabbits. The hair tonic preparation was applied to the rabbit's back once a day for 21 days and hair growth was observed on days 7, 14 and 21 using a caliper. Hair weight was weighed on day 21. Data from physical quality, stability, hair measurement and preference tests were subjected to statistical tests.

The research results showed that the hair tonic preparation of kecombrang leaf extract met good physical quality and stability. The higher concentration of extract in the hair tonic preparation resulted in differences in rabbit hair growth activity. The results can be seen from the parameters of hair length and hair weight, but cannot be positively controlled. The hair tonic formula that has effective results on rabbit hair growth is formula 3. The hair tonic preparation formula that is most liked by respondents is formula 1.

Keywords : *Hair loss, Combrang leaf, Hair Tonic, New Zealand White Rabbit*