

INTISARI

SETIANI DIAN NUN'SA PUTRI. 2023, FORMULASI & UJI AKTIVITAS SEDIAAN CREAMBATH EKSTRAK DAUN KEKOMBRANG (*Etlingera elatior*) TERHADAP PERTUMBUHAN RAMBUT KELINCI *New Zealand White*, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI SURAKARTA, Dibimbing oleh apt. Dwi Ningsih, S.Si., M.Farm. dan apt. Siti Aisyah, S.Farm., M.Sc.

Rambut rontok dapat menyebabkan kebotakan yang dikhawatirkan setiap manusia. Ekstrak daun kecombrang memiliki aktivitas sebagai pertumbuhan rambut. Kandungan pada ekstrak daun kecombrang yaitu senyawa flavonoid, saponin, tanin, dan alkaloid, sehingga pada penelitian ini perlu dikembangkan menjadi sediaan *creambath* untuk meningkatkan rangsangan pertumbuhan rambut serta memudahkan penggunaan. Penelitian ini bertujuan mengetahui pengaruh variasi setil alkohol sediaan *creambath* ekstrak daun kecombrang terhadap mutu fisik, stabilitas, tingkat pertumbuhan rambut kelinci, serta mengetahui formula terbaik dari mutu fisik dan pertumbuhan rambut kelinci.

Daun kecombrang diekstraksi dengan metode maserasi menggunakan etanol 96%. Sediaan *creambath* dengan konsentrasi ekstrak 10%, divariasikan dengan setil alkohol, yaitu 7,5%, 10%, dan 12% untuk mendapatkan mutu fisik serta aktivitas yang baik. Sediaan *creambath* dilakukan uji mutu fisik meliputi organoleptis, pH, homogenitas, viskositas, daya lekat, daya sebar, tipe krim, dan stabilitas. Pengujian aktivitas secara *in vivo* menggunakan kelinci *New Zealand White*. Sediaan *creambath* diaplikasikan ke punggung kelinci satu kali sehari selama 21 hari dan di amati pertumbuhan rambut pada hari ke-7, -14 dan -21 menggunakan jangka sorong dan pada hari ke-21 ditimbang bobot rambut. Data uji mutu fisik, stabilitas dan pengukuran rambut dilakukan uji statistik.

Hasil penelitian menunjukkan variasi konsentrasi setil alkohol berpengaruh terhadap uji mutu fisik, panjang rambut kelinci, dan bobot rambut kelinci. Viskositas, daya letak, dan daya sebar mempengaruhi pertumbuhan rambut kelinci dan bobot rambut kelinci. Formula *creambath* ekstrak daun kecombrang dengan konsentrasi setil alkohol 7,5% memberikan hasil yang baik dilihat dari mutu fisik dan pertumbuhan rambut kelinci.

Kata kunci : Rambut rontok, Daun kecombrang, *Creambath*, Setil alkohol, Kelinci *New Zealand White*

ABSTRACT

SETIANI DIAN NUN'SA PUTRI. 2023, FORMULATION & ACTIVITY TESTING OF A CREAMBATH EXTRACT OF COMBRANG (*Etlingera elatior*) LEAVES ON HAIR GROWTH OF New ZEW ZELAND WHITE RABBIT, THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY SURAKARTA, Supervised by apt. Dwi Ningsih, S.Si., M.Farm. and apt. Siti Aisyah, S.Farm., M.Sc.

Hair loss can cause baldness which every human being worries about. Combrang leaf extract has hair growth activity. The contents of kecombrang leaf extract are flavonoids, saponins, tannins and alkaloids, so in this research it needs to be developed into a cream bath preparation to increase the stimulation of hair growth and make it easier to use. This research aims to determine the effect of variations in cetyl alcohol preparations of kecombrang leaf extract creambath to meet the physical quality and stability test requirements, the level of rabbit hair growth, and to find out the best formula for the physical quality and hair growth of rabbits.

Combrang leaves were extracted using the maceration method using 96% ethanol. Creambath preparation with an extract concentration of 10%, varied with cetyl alcohol, namely 7.5%, 10%, and 12%. Cream bath preparations are subjected to physical quality tests including organoleptic, pH, homogeneity, viscosity, adhesive power, spreadability, cream type and stability. In vivo activity testing using New Zealand White rabbits. The cream bath 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 and on day 21 the weight of the hair was weighed. Test data for physical quality, stability and hair measurements were subjected to statistical tests.

The results showed that variations in cetyl alcohol concentration had an effect on physical quality tests, rabbit hair length and rabbit hair weight. Viscosity, layability, and spreadability affect rabbit hair growth and rabbit hair weight. The cream bath formula of kecombrang leaf extract with a cetyl alcohol concentration of 7.5% provides optimal results in terms of the physical quality and hair growth of rabbits with hair length on the 7th day 1.05 cm, 14th 1.45 cm, 21st 1, 93 cm and hair weight 0.31 grams.

Keywords : Hair loss, Combrang leaf, Creambath, cetyl alcohol, New Zealand White Rabbit