INTISARI

KURNIAWATI, S., 2016, FORMULASI DAN UJI MUTU FISIK LOTION EKSTRAK TEMULAWAK (*Curcuma xanthorrhiza* Roxb.), KARYA TULIS ILMIAH, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Temulawak *(Curcuma xanthorrhiza* Roxb.*)* merupakan salah satu tumbuhan obat suku Zingiberaceae yang banyak tumbuh di Indonesia. Temulawak diketahui memiliki banyak manfaat antara lain sebagai antihepatitis, antikarsinogenik, antimikroba, antioksidan, antihiperlipidemia, dan antiinflamasi (Kusuma, 2012). Penelitian ini bertujuan untuk mengetahui ekstrak temulawak (*Curcuma xanthorrhiza* Roxb.) dapat dibuat sediaan *lotion* dengan variasi basis asam stearat dan trietanolamin dan mengetahui pengaruh variasi basis asam stearat dan triethanolamin dalam pembuatan ekstrak temulawak (*Curcuma xanthorrhiza* Roxb.) terhadap uji mutu fisik.

Ekstrak etanol temulawak diperoleh dengan metode maserasi menggunakan etanol 96%. *Lotion* dibuat dalam 3 formula dimana Formula 1, 2, dan 3 masing-masing mengandung ekstrak sebanyak 7,6%. *Lotion* ekstrak temulawak dibuat dengan perbedaan konsentrasi asam stearat dan trietanolamin. Formula I (9%:3%), formula II (8,25%:3,75%) dan formula III (7,5%:4,5%). Kemudian diuji mutu fisiknya yang meliputi organoleptis, homogenitas, pH, viskositas, daya sebar, dan daya lekat dan uji tipe *lotion*. Data diolah secara statistik dengan spss 17 menggunakan *one way* ANOVA.

Hasil penelitian menunjukkan ekstrak temulawak (*Curcuma xanthorrhiza* Roxb.) dapat dibuat sediaan *lotion* dan peningkatan asam stearat berpengaruh terhadap peningkatan viskositas, peningkatan daya lekat dan penurunan daya sebar, sebaliknya peningkatan trietanolamin berpengaruh terhadap penurunan viskositas, penurunan daya lekat dan peningkatan daya sebar.

Kata kunci: *Lotion*, ekstrak temulawak, triethanolamin, asam stearat, mutu fisik *lotion.*

ABSTRACT

KURNIAWATI, S., 2016, FORMULATION AND PHYSICAL QUALITY TEST OF TEMULAWAK (*Curcuma xanthorrhiza* Roxb.) EXTRACT LOTION, SCIENTIFIC PAPER, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

Temulawak (*Curcuma xanthorrhiza* Roxb.) is a medicinal plant of *Zingiberaceae* family that grows in Indonesia. Temulawak is known to have many benefits such as anti-hepatitis, anti-carcinogenic, antimicrobial, anti-oxidants, anti-hyperlipidemia, and anti-inflammatory (Kusuma, 2012). This study was aimed to know whether temulawak (*Curcuma xanthorrhiza* Roxb) could be made lotion product with variation of stearic acid and triethanolamin and to find out the effect of stearic acid and triethanolamin basic variation in the production of temulawak extract on the physical quality test.

Temulawak ethanol extract was obtained by maceration method using ethanol 96%. The lotions were made in 3 formulas where ineach formula contains 7.6% extract. Temulawak extract lotion were made with difference concentrations of stearic acid and triethanolamin. Formula I (9% : 3%), formula II (8.25% : 3.75%), and formula III (7.5% : 4.5%), and then the physical quality were tested including organoleptic, homogeneity, pH, viscosity, dispersive power, adhesiveness, and type of lotion. Data was processed statistically with SPSS 17 using one way *Anova*.

The result of the study showed that lotion of temulawak extract could be made lotion product, and the increased in stearic acid affected the increased of viscosity, increased of adhesion, and decreased the dispersive power. On the contrary, an increase in triethanolamin affected to decrease the viscosity, reduced adhesiveness and increased the dispersive power.

Keywords: lotion, temulawak extract, triethanolamin, stearic acid, physical quality.