

INTISARI

Mahardhika NP., 2021. FORMULASI SEDIAAN KRIM TABIR SURYA FRAKSI ETIL ASETAT BUNGA ROSELA (*Hibiscus sabdariffa* L.) DENGAN VARIASI KONSENTRASI ASAM STEARAT DAN TRIETANOLAMIN SEBAGAI EMULGATOR, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Fraksi etil asetat bunga rosella mengandung flavonoid yang mampu menyerap sinar UV-A dan UV-B. Krim fraksi etil asetat diformulasi dengan mengkombinasikan asam stearat dan trietanolamin. Tujuan dari penelitian ini adalah untuk mengetahui apakah formula krim dengan variasi konsentrasi emulgator yang berbeda memiliki pengaruh terhadap mutu dan stabilitas fisik krim serta mengetahui aktifitas SPF krim dan mengetahui formula yang memiliki mutu dan stabilitas serta nilai SPF yang paling baik.

Fraksi etil asetat dibuat dari fraksinasi ekstrak etanol bunga rosella, yang kemudian dibuat krim dengan konsentrasi asam stearat (10%;15%;20%) TEA (2%;3%;4%) serta dilakukan evaluasi mutu fisik sediaan krim berupa uji organoleptis, homogenitas, *pH*, daya lekat, tipe emulsi, viskositas, daya sebar, daya proteksi krim dan uji stabilitas, uji aktivitas tabir surya dengan menghitung nilai SPF secara *in vitro* hasil yang diperoleh di analisis menggunakan SPSS dengan uji *Kolmogorov-smirnov* dan uji ANOVA.

Hasil penelitian menunjukkan bahwa fraksi etil asetat bunga rosella (*Hibiscus sabdariffa* L.) variasi konsentrasi emulgator mempengaruhi mutu dan stabilitas krim. Krim fraksi etil asetat bunga rosella memiliki aktifitas sebagai SPF. Krim yang memiliki mutu dan stabilitas fisik serta nilai SPF yang baik yaitu F1 dengan konsentrasi asam stearat 10% : TEA 2% dengan nilai SPF 22,1.

Kata kunci : krim, tabir surya, fraksi etil asetat bunga rosella, stabilitas, emulgator.

ABSTRACT

Mahardhika, NP., 2021. FORMULATION OF THE PREPARATION OF SOLAR CREAM ETHYL ACETATE FLOWER FRACTION OF ROSELA (*Hibiscus sabdariffa* L.) WITH VARIATIONS OF CONCENTRATIONS OF STEARIC ACID AND TRIETANOLAMIN AS EMULGATORS, THESIS, FACULTY OF PHARMACEUTICALS, SETIA BUDI UNIVERSITY SURAKARTA.

The ethyl acetate fraction of rosella flowers contains flavonoids that can absorb UV-A and UV-B rays. Ethyl acetate fraction cream is formulated by combining stearic acid and triethanolamine. The purpose of this study was to determine whether the cream formula with variations in the concentration of different emulsifiers had an effect on the quality and physical stability of the cream and to determine the SPF activity of the cream and to find out which formula had the best quality and stability and SPF value.

The ethyl acetate fraction was made from the fractionation of the ethanolic extract of rosella flower, which was then made cream with a concentration of stearic acid (10%; 15%; 20%) TEA (2%; 3%; 4%) and an evaluation of the physical quality of the cream preparation was carried out in the form of organoleptic tests. , homogeneity, pH, adhesion, emulsion type, viscosity, spreadability, cream protection and stability test, sunscreen activity test by calculating the SPF value in vitro. The results obtained were analyzed using SPSS with *Kolmogorov-Smirnov* test and ANOVA test.

The results of the study showed that the ethyl acetate fraction of rosella flower (*Hibiscus sabdariffa* L.) variations in emulsifier concentration affected the quality and stability of the cream. Rosella flower ethyl acetate fraction cream has activity as SPF. Creams that have quality and physical stability as well as good SPF values are F1 with a concentration of 10% stearic acid: 2% TEA with an SPF value of 22.1.

Keywords: cream, sunscreen, roselle flower ethyl acetate fraction, cream, emulsifier.