

INTISARI

DENDI RUDINI, 2022, UJI AKTIVITAS EMULGEL EKSTRAK ETANOL DAUN SALAM (*Syzygium polyanthum* (Wight) Walp.) SEBAGAI TABIR SURYA SECARA IN VITRO, SKRIPSI, PROGRAM STUDI S1 FARMASI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA. Dibimbing oleh Dr. Drs. Supriyadi, M.Si. dan apt. Taufik Turahman, M.Farm.

Daun salam (*Syzygium polyanthum* (Wight) Walp.) merupakan tanaman yang mengandung zat aktif yang berpotensi sebagai tabir surya yaitu fenolik, flavonoid, dan tanin. Emulgel dapat membantu pengaplikasiannya sebagai sediaan tabir surya. Tujuan dilakukan penelitian ini yaitu untuk mengetahui ekstrak etanol daun salam (*Syzygium polyanthum* (Wight) Walp.) dapat dibuat sediaan emulgel dengan mutu fisik, stabilitas yang baik, dan mengetahui aktivitas emulgel serta formula yang memiliki aktivitas tabir surya yang paling baik.

Penelitian ini dilakukan ekstraksi daun salam dengan metode maserasi menggunakan etanol 96%, kemudian dibuat 3 formula dengan perbedaan konsentrasi ekstrak daun salam yaitu 4%, 5% dan 7%. Sediaan emulgel ekstrak etanol daun salam dilakukan pengujian stabilitas dan mutu fisik. Uji aktivitas tabir surya emulgel secara in vitro menggunakan spektrofotometri UV. Data diolah dengan pendekatan statistik *Shapiro-wilk*, kemudian uji *One Way Anova/Kruskal Wallis*, dan dilanjutkan uji *paired T test/Wilcoxon*.

Diperoleh 3 formula sediaan emulgel ekstrak etanol daun salam (*Syzygium polyanthum* (Wight) Walp.) dengan mutu fisik yang baik dan stabil, dengan nilai SPF untuk formula emulgel konsentrasi zat aktif 4%, 5%, dan 7% berturut-turut adalah 14,482; 16,295; dan 20,542. Emulgel yang paling aktif sebagai tabir surya adalah emulgel dengan konsentrasi zat aktif 7%. Analisis statistik menunjukkan bahwa konsentrasi ekstrak mempengaruhi formula emulgel dan semua formula stabil terhadap suhu dan lama penyimpanan.

Kata kunci: *Syzygium polyanthum* (Wight) Walp., emulgel, tabir surya, Spektrofotometri UV

ABSTRACT

DENDI RUDINI, 2022, ACTIVITY TEST OF EXTRACT SALAM LEAF (*Syzygium polyanthum* (Wight) Walp.) EMULGEL AS SUNSCREEN IN VITRO, THESIS, BACHELOR OF PHARMACY, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA. Supervised by Dr. Drs. Supriyadi, M.Si. and apt. Taufik Turahman, M.Farm.

Bay leaf (*Syzygium polyanthum* (Wight) Walp.) is a plant that contains active substances that have potential as sunscreens, namely phenolics, flavonoids, and tannins. Emulgel can help its application as a sunscreen preparation. The purpose of this study was to determine the ethanolic extract of bay leaf (*Syzygium polyanthum* (Wight) Walp.) can be made of emulgel preparations with physical quality, good stability, and determine the activity of emulgel and the formula that has the best sunscreen activity.

In this research, bay leaf extraction was carried out by maceration method using 96% ethanol, then 3 formulas were made with different concentrations of bay leaf extract, namely 4%, 5% and 7%. Emulgel preparations of bay leaf ethanol extract were tested for stability and physical quality. In vitro test of emulgel sunscreen activity using UV spectrophotometry. The data was processed using the Saphiro-Wilk statistical approach, then the One Way Anova/Kruskal Walis test, and continued with the paired T test/Wilcoxon test.

Three emulgel formulations of bay leaf ethanol extract (*Syzygium polyanthum* (Wight) Walp.) were obtained with good and stable physical quality, with the SPF value for the emulgel formula the concentration of active substances 4%, 5%, and 7% respectively is 14,482; 16,295; dan 20,542. The most active emulgel as a sunscreen is emulgel with an active substance concentration of 7%. Statistical analysis showed that the concentration of the extract affects the emulgel formula and all formulas are stable to temperature and storage length.

Key words : *Syzygium polyanthum* (Wight) Walp., emulgel, sun screen, Spektrofotometri UV