

ABSTRAK

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FORMULASI, EVALUASI MUTU, DAN UJI AKTIVITAS TABIR SURYA SEDIAAN LOSION EKSTRAK ETANOL 70% DAUN BANGUN-BANGUN (*Coleus amboinicus* Lour.)

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(XV + 82 halaman; 20 tabel; 15 gambar; 15 lampiran)

Sinar matahari mengandung sinar Ultraviolet (UV) yang dapat mengakibatkan beberapa dampak buruk bagi kulit seperti kemerahan, terasa seperti terbakar, menimbulkan eritema, kehilangan elastisitas, timbul kerutan, hingga memicu pertumbuhan kanker kulit. Ekstrak daun bangun-bangun (*Coleus amboinicus* Lour.) memiliki khasiat sebagai tabir surya karena mengandung senyawa flavonoid dan fenolik yang dapat memberikan perlindungan pada kulit. Penelitian ini bertujuan untuk memformulasikan, mengetahui kestabilan fisik, nilai transmisi eritema, nilai transmisi pigmentasi dan nilai SPF dari sediaan losion. Ekstrak etanol daun bangun-bangun diperoleh dengan cara maserasi menggunakan etanol 70% kemudian dibuat sediaan losion dengan menggunakan variasi dosis ekstrak 0, 1% dan 2%. Losion dievaluasi secara fisik dan diuji mutunya dengan metode *cycling test*. Pengujian untuk menentukan nilai SPF, %Te, dan %Tp dilakukan menggunakan metode spektrofotometri UV-Vis. Nilai SPF losion dengan konsentrasi ekstrak 1% dan 2% berturut-turut didapatkan sebesar $10,40 \pm 0,13$ dan $19,17 \pm 0,03$ SPF. Nilai persen transmisi eritema pada losion ekstrak dengan konsentrasi 1% dan 2% berturut-turut didapatkan sebesar $0,13 \pm 0,00$ dan $0,017 \pm 0,00$. Nilai persen transmisi pigmentasi pada losion ekstrak dengan konsentrasi 1% dan 2% berturut-turut didapatkan sebesar $0,16 \pm 0,00$ dan $0,03 \pm 0,00$.

Kata Kunci: Bangun-bangun, *Coleus amboinicus* Lour., Losion, Tabir surya

Referensi: 61 (1966 – 2023)

ABSTRACT

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FORMULATION, QUALITY EVALUATION, AND SUNBLOCK ACTIVITY TESTING OF 70% ETHANOL EXTRACT LOTION FROM BANGUN-BANGUN LEAVES (*Coleus amboinicus* Lour.)

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*Sunlight, containing ultraviolet (UV) light, can result in various adverse effects on the skin, such as redness, a burning sensation, erythema, loss of elasticity, wrinkles, and potentially even trigger the growth of skin cancer. Bangun-bangun leaf extract (*Coleus amboinicus* Lour.) is believed to offer effective sun protection due to its rich content of flavonoids and phenolics, both of which can provide valuable skin protection. The aim of this study is to formulate a lotion, assess its physical stability, erythema transmission value, and SPF rating. The ethanol extract of the bangun-bangun leaf is obtained through maceration using 70% ethanol, and then a lotion is prepared with varying extract doses of 0, 1% and 2%. The lotion is subjected to physical evaluation and tested for quality using the cycling test method. Tests to determine SPF, %Te, and %Tp values are conducted using the UV-Vis spectrophotometry method. The SPF value of the lotion with 1% and 2% extract concentration was found to be 10.40 ± 0.13 and 19.17 ± 0.03 SPF, respectively. The percent transmission value of erythema in the extract lotion with a concentration of 1% and 2% was found to be 0.13 ± 0.00 and 0.017 ± 0.00 , respectively. The percent value of pigmentation transmission in the extract lotion with a concentration of 1% and 2% was found to be 0.16 ± 0.00 and 0.03 ± 0.00 , respectively.*

*Keywords: Bangun-bangun, *Coleus amboinicus* Lour., lotion, sunscreen*

References: 61 (1966 – 2023)