

INTISARI

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Efektifitas dari suatu tabir surya dapat ditunjukkan salah satunya dengan nilai *Sun Protection Factor* (SPF). Tanaman jeruk purut termasuk dalam famili *Rutaceae* memiliki aktivitas penangkal radikal bebas dan dapat digunakan sebagai bahan aktif tabir surya. Tujuan penelitian ini adalah untuk mengetahui nilai *Sun Protection Factor* (SPF) ekstrak etanol daun jeruk purut. Proses ekstraksi dilakukan dengan cara maserasi menggunakan etanol 95% dan penentuan nilai SPF menggunakan metode Mansur secara spektrofotometri UV-Vis. Hasil penelitian menunjukkan bahwa nilai SPF pada konsentrasi 20 ppm sebesar $2,52 \pm 0,32$ (minimal); konsentrasi 40 ppm sebesar $4,36 \pm 0,04$ (sedang); konsentrasi 80 ppm sebesar $5,22 \pm 0,41$ (sedang); konsentrasi 160 ppm sebesar $11,06 \pm 0,09$ (maksimal); dan konsentrasi 320 ppm sebesar $22,14 \pm 4,41$ (ultra). Berdasarkan hasil analisis data didapatkan adanya pengaruh variasi konsentrasi ekstrak etanol daun jeruk purut terhadap nilai *Sun Protection Factor* (SPF) secara signifikan, dengan nilai $p\text{-value} = 0,009$ ($p\text{-value} < 0,05$).

Kata Kunci: Jeruk Purut; Ekstrak Etanol; Nilai *Sun Protection Factor* (SPF)

ABSTRACT

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One of the effectiveness of sunscreen can be shown with the value of the Sun Protection Factor (SPF). Kaffir lime plants belonging to the Rutaceae family have free radical scavenging activity and can be used as an active ingredient in sunscreens. The study aims to determine the Sun Protection Factor (SPF) value of the ethanol extract of kaffir lime leaves. The extraction process was carried out by maceration using 95% ethanol and determining the SPF value using the Mansur method by UV-Vis spectrophotometry. The results show that the SPF value at a concentration of 20 ppm was 2.52 ± 0.32 (minimum); concentration of 40 ppm was 4.36 ± 0.04 (medium); concentration of 80 ppm was 5.22 ± 0.41 (medium); concentration of 160 ppm is 11.06 ± 0.09 (maximum), and the concentration of 320 ppm was 22.14 ± 4.41 (ultra). Based on the results of data analysis, it was found that there was a significant effect of variations in the concentration of ethanol extract of kaffir lime leaves on the value of Sun Protection Factor (SPF), with $p\text{-value} = 0.009$ ($p\text{-value} < 0.05$).

Keywords: Kaffir Lime, Ethanol Extract, Value of Sun Protection Factor (SPF)

