SKRINING FITOKIMIA DAN UJI SPF PADA EKSTRAK METANOL DAUN DADAP SEREP (*Erythrina subumbrans* (*Hassk*.) Merr.)

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INTISARI

Latar Belakang: Sinar matahari merupakan sumber energi yang bermanfaat bagi semua makhluk hidup, namun paparan sinar ultraviolet (UV) memiliki efek merugikan terhadap kulit. Upaya dalam mencegah efek berbahaya dari paparan sinar UV salah satunya yaitu dengan penggunaan tabir surya. Dadap serep (*Erythrina subumbrans*) merupakan tanaman yang memiliki banyak khasiat sebagai tanaman herbal. Tanaman ini mengandung senyawa fenolik yaitu alkaloid, flavonoid, tanin, dan saponin. Senyawa flavonoid adalah senyawa akif antioksidan yang memiliki manfaat sebagai tabir surya karena terdapat gugus kromofor yang dapat melindungi paparan sinar UV dengan cara menyerap sinar UV-A dan UV-B. Karena itu penelitian pada daun dadap serep dilakukan untuk mengetahui efektifitas tanaman tersebut sebagai bahan aktif tabir surya.
Tujuan Penelitian: Mengetahui hasil identifikasi senyawa metabolit sekunder dan potensi ekstrak metanol daun dadap serep sebagai bahan aktif dalam tabir surya.
Metode Penelitian: Serbuk daun dadap serep diekstraksi menggunakan metode maserasi dengan pelarut metanol. Ekstrak metanol daun dadap serep akan diuji kualitatif skrining fitokimia, kemudian dilanjutkan uji kuantitatif penentuan nilai SPF, %Te, dan %Tp menggunakan metode spektrofotometri UV-Vis.
Hasil Penelitian: Uji kualitatif ekstrak metanol daun dadap serep memberikan hasil positif alkaloid, flavonoid, fenolik, saponin, dan tanin. Diperoleh nilai SPF berturut-turut pada konsentrasi 500, 750, 1000 ppm yaitu sebesar 37,265, 37,923, dan 38,325, semua konsentrasi tergolong pada kategori proteksi tinggi. Nilai %Te berturut-turut pada konsentrasi 500, 750, 1000 ppm yaitu sebesar 0,018%, 0,015%, 0,014%, semua konsentrasi tergolong pada kategori *sunblock*. Nilai %Tp berturut-turut pada konsentrasi 500, 750, 1000 ppm yaitu sebesar 0,029%, 0,025%, 0,024%, semua konsentrasi tegolong pada kategori *sunblock*.
Kesimpulan: Dadap serep memiliki potensi sebagai bahan aktif tabir surya.

Kata Kunci: Dadap serep, Skrining fitokimia, SPF, Spektrofotometri UV-Vis.

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PHYTOCHEMICAL SCREENINGAND SPF TEST OF METHANOL EXTRACT OF DADAP SEREP (*Erythrina subumbrans* (*Hassk.*) Merr.) LEAVES

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ABSTRACT

Background: Sunlight is a source of energy that is good for all living things, but the exposure of ultraviolet (UV) rays could give some unwanted condition for the skin. Sunscreen utilitization could be option one in order to avoid the dangerous effects of UV exposure. Dadap serep (*Erythrina subumbrans*) is a plant that has many uses as a herbal plant. This plant contains alkaloids, flavonoids, saponins, and tannins. Flavonoid compounds are known as active antioxidants that can be used as sunscreens because it's contain chromophore groups that protect against UV radiation by absorbing UV-A and UV-B rays. Therefore, this research was conducted on dadap serep leaves to determine the plant's efficacy as a sunscreen ingredient.

Objective: The purpose of this research is to learn more about the secondary metabolite compounds that were identified and to determined the effectiveness of a sunscreen made from a methanol extract of dadap serep leaves.

Method: The powdered leaves of dadap serep were macerated using methanol as the solvent. The methanol leaf extract of dadap serep will be evaluated qualitatively for phytochemical screening. Subsequently, quantitative tests were conducted to as certain SPF, %Te, and %Tp values through UV-Vis spectrophotometry.

Result: Evaluation of the method qualitative content Alkaloids, flavonoids, phenolics, saponins, and tannins were all found in enough amounts in a methanol extract of dadap serep leaf. At 500, 750, and 1000 ppm, the SPF values were 37,265, 37,923, and 38,325; at 500, 750, and 1000 ppm, all concentrations belonging to the high protection category. The %Te values were 0.018%, 0.015%, and 0.014%; and at 500, 750, and 1000 ppm, all concentrations belonging to the sunblock category. The %Tp values were 0.029%, 0.025%, and 0.024%, all concentrations belonging to the sunblock category.

Conclusion: Dadap serep leaves have potential effect as an active ingredient in sunscreen

Keyword: Dadap serep, Phytochemical screening, SPF, UV-Vis spectrophotometry.

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