UJI EFEKTIVITAS EKSTRAK ETANOL DAUN NANGKA (*Artocarpus heterophyllus* Lam.) SEBAGAI SEDIAAN *LOTION* TABIR SURYA

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ABSTRAK

Latar belakang : Paparan berlebih sinar matahari dapat merusak kulit. Daun nangka (*Artocarpus heterophyllus* Lam.) diketahui memiliki senyawa fenolik yang berpotensi sebagai fotoproteksi. Kerusakan pada kulit akibat paparan sinar matahari berlebih dapat dicegah dengan menggunakan formulasi ekstrak etanol daun nangka.

Tujuan : Mengetahui apakah ekstrak etanol 96% daun nangka (*A. heterophyllus* L.) memiliki potensi sebagai sediaan tabir surya berdasarkan nilai SPF , dan mengetahui perbedaan variasi konsentrasi ekstrak etanol 96% daun nangka dalam sediaan *lotion* terhadap sifat fisik sediaan dan aktivitasnya sebagai tabir surya.

Metode : Simplisia daun nangka diekstrak dengan larutan etanol 96%. Ekstrak diformulasikan menjadi *lotion* dengan konsentrasi 3%,4%,dan 5%. Sediaan lotion dievaluasi secara fisik dan nilai SPFnya .

Hasil : Ekstrak etanol daun nangka mengandung senyawa metabolit sekunder berupa alkaloid,flavonoid,tanin, dan steroid. Sediaan *lotion* ekstrak etanol daun nangka memiliki aktivitas tabir surya dengan nilai 8,04 pada tingkat rendah.

Kesimpulan: Ekstrak etanol daun nangka memiliki efektivitas sebagai sediaan tabir surya serta adanya perbedaan konsentrasi ekstrak etanol daun nangka terhadap nilai SPF sediaan *lotion* ekstrak etanol daun nangka.

Kata Kunci : *Daun Nangka, Artocarpus heterophyllus Lam., lotion, SPF.*

EVALUATION THE EFFECTIVENESS OF JACKFRUIT (ARTOCARPUS HETEROPHYLLUS LAM.) ETHANOL LEAVES EXTRACT AS A SUNSCREEN LOTION

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ABSTRACT

Background : Excessive exposure to sun radiation can damage human skin. Jackfruit (Artocarpus heterophyllus Lam.) leaves known to contains phenolic compound which possess potential photoprotective properties.Skin damage due negative sun exposure can be prevented by using a formulation of jackfruit leaves extract as a lotion.

Objective : To determine whether the 96% ethanol extract of jackfruit leaves possesses potential as a sunscreen formulation based on SPF value and to evaluate the varying concentrations extract in lotion formulations of the physical properties of the formulation and its sunscreen activity.

Method : Simplicia of jackfruit leaves was extracted using 96% of ethanol solvent. The extract was formulated into a lotion with various concentration, namely 3%,4%, and 5%. The lotion was evaluated for its physichal properties and the SPF value test.

Result : The ethanol extract of jackfruit leaves contains secondary metabolites, including alcaloids, flavonoids, tannins, and steroids. The lotion formulation containing the ethanol extract exhibited sunscreen activity with a Sun Protection Factor (SPF) value of 8.04, which is categorized as low protection.

Conclusion: The ethanol extract of jackfruit leaves having the effectiveness as a sunscreen agent, and the concentration of the extract in the lotion formulation significantly influences the Sun Protection Factor (SPF) value.

Keyword: *Jackfruit leaves, Artocarpus heterophyllus Lam., lotion, SPF*