

ABSTRAK

**FORMULASI DAN UJI MUTU FISIK SEDIAAN KRIM
EKSTRAK KULIT BATANG KELOR
(*Moringa oleifera* Lamk.)**

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Krim merupakan salah satu bentuk sediaan farmasi topikal yang banyak dimanfaatkan untuk membantu mengatasi berbagai keluhan pada kulit, baik yang bersifat ringan maupun kronis. Ekstrak kulit batang kelor (*Moringa oleifera* Lamk.) diketahui mengandung senyawa bioaktif, terutama flavonoid dan tanin, yang memiliki potensi sebagai agen antibakteri serta antiinflamasi. Potensi farmakologis ini menjadikannya kandidat yang layak untuk diformulasikan dalam bentuk sediaan krim guna memberikan efek terapeutik lokal. Demi menjamin mutu, keamanan, dan kestabilan produk, dilakukan serangkaian uji fisik meliputi pemeriksaan organoleptis, homogenitas, daya sebar, viskositas, pH, serta penentuan tipe emulsi yang terbentuk. Dalam penelitian ini, sebanyak 200 gram kulit batang kelor dikeringkan, digiling menjadi serbuk halus, kemudian diekstraksi menggunakan etanol 96% selama tiga hari melalui metode maserasi. Ekstrak kental yang diperoleh selanjutnya diuapkan hingga kering, menghasilkan 11,95 gram ekstrak murni. Ekstrak tersebut diformulasikan menjadi dua jenis krim dengan basis emulsi minyak dalam air (M/A). Hasil evaluasi menunjukkan krim berwarna putih kekuningan, memiliki tekstur semi padat, aroma khas kulit kelor, serta bersifat homogen. Daya sebar berkisar 5–7 cm, pH $\pm 5,6$ untuk Formula I dan $\pm 6,4$ untuk Formula II, dengan viskositas 2000–50.000 cP. Kesimpulannya, kedua formula krim ekstrak kulit batang kelor menunjukkan sifat fisik yang stabil, memenuhi standar mutu, dan berpotensi dikembangkan lebih lanjut sebagai sediaan topikal.

Kata kunci : *Moringa oleifera* Lamk.) Krim, M/A, Kulit Batang Kelor

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ABSTRACT

FORMULATION AND PHYSICAL TESTING OF CREAM EXTRACT FROM THE BARK OF THE MORINGA (*Moringa oleifera* Lamk.)

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*Cream is one of the most commonly used pharmaceutical topical dosage forms, widely utilized to help alleviate various skin complaints, ranging from mild to chronic conditions. The bark extract of *Moringa oleifera* Lamk. is known to contain bioactive compounds, particularly flavonoids and tannins, which possess potential antibacterial and anti-inflammatory properties. These pharmacological potentials make it a promising candidate for formulation into a cream dosage form to provide localized therapeutic effects. To ensure the quality, safety, and stability of the product, a series of physical evaluations were conducted, including organoleptic examination, homogeneity, spreadability, viscosity, pH, and determination of the type of emulsion formed. In this study, 200 grams of moringa bark were dried, ground into a fine powder, and then extracted using 96% ethanol for three days through maceration. The thick extract obtained was further evaporated to dryness, yielding 11.95 grams of pure extract. This extract was formulated into two types of creams using an oil-in-water (O/W) emulsion base. Evaluation results showed that the creams were yellowish-white in color, had a semi-solid texture, a characteristic moringa bark aroma, and were homogeneous. The spreadability ranged from 5–7 cm, with a pH of approximately 5.6 for Formula I and approximately 6.4 for Formula II, and viscosity ranging from 2000–50,000 cP. In conclusion, both cream formulations of moringa bark extract exhibited stable physical properties, met quality standards, and have potential to be further developed as topical preparations.*

Keywords : *Moringa oleifera* Lamk, Cream, O/W Emulsion, Moringa Stem Bark

References : 15 References (2008-2023)