

**Formulasi Dan Evaluasi Karakteristik Krim
Ekstrak Etanol Daun Kelor
(*Moringa oleifera Lamk*)**

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ABSTRAK

Latar Belakang: daun kelor merupakan tanaman herbal yang kaya akan senyawa aktif seperti flavonoid, tannin, vitamin C, dan senyawa fenolik lain yang memiliki aktivitas antiinflamasi, serta antimikroba. Kandungan bioaktif tersebut menjadikan daun kelor potensial untuk diformulasikan kedalam sediaan topical, salah satunya dalam bentuk krim. **Tujuan:** Untuk memperoleh formula krim ekstrak etanol daun kelor yang memenuhi syarat uji fisik sediaan meliputi uji organoleptis, homogenitas, daya sebar, viskositas, pH, dan tipe emulsi. **Metode Penelitian:** daun kelor sebanyak 100 g dikeringkan dan dihaluskan menjadi simplisia kering, kemudian dilakukan proses maserasi menggunakan pelarut etanol 70% sebanyak 1000 mL selama 3 hari. Setelah proses penyaringan dan penguapan pelarut, diperoleh ekstrak kental yang kemudian dikeringkan hingga menghasilkan ekstrak kering seberat 19,87g. Ekstrak ini diformulasikan dalam dua bentuk sediaan krim dengan basis emulsi minyak dalam air (M/A) dan diuji karakteristik fisiknya. **Hasil:** Uji organoleptis menunjukkan krim berwarna putih kekuningan, berbentuk semi padat, berbau khas kulit daun kelor, dan homogen. Uji daya sebar menunjukkan hasil dalam rentang ideal 5–7 cm. Uji pH menunjukkan nilai pada Formula I $\pm 5,6$ dan Formula II $\pm 6,4$ formula III $\pm 6,8$. Viskositas krim berada dalam rentang 2000–50.000 cP. Uji tipe emulsi menunjukkan bahwa kedua formula merupakan tipe emulsi M/A (minyak dalam air). Kesimpulan: Krim ekstrak daun kelor (*Moringa oleifera Lamk.*) dengan basis M/A pada ketiga formula menunjukkan hasil evaluasi fisik yang memenuhi syarat organoleptis, homogenitas, daya sebar, viskositas, pH, dan tipe emulsi, sehingga potensial untuk dikembangkan sebagai sediaan topikal.

Kata kunci: Moringa oleifera Lamk, Krim, Uji Fisik, Emulsi M/A

**Formulation And Evaluation Of Characteristic Of
Moringa Leaf Ethanol Extract Cream
(*Moringa oleifera* Lamk)**

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ABSTRACT

Background: *Moringa* leaves are a herbal plant that is rich in active compounds such as flavonoids, tannins, vitamin C and other phenolic compounds which have anti-inflammatory and antimicrobial activity. This bioactive content makes *Moringa* leaves potential to be formulated into topical preparations, one of which is in cream form. **Objective:** To obtain a cream formula for *Moringa* leaf ethanol extract that meets the physical test requirements of the preparation including organoleptic tests, homogeneity, spreadability, viscosity, pH and emulsion type. **Research Method:** 100 g of *Moringa* leaves were dried and ground into dry simplicia, then carried out a maceration process using 1000 mL of 70% ethanol solvent for 3 days. After the filtering process and solvent evaporation, a thick extract was obtained which was then dried to produce a dry extract weighing 19.87g. This extract was formulated in two cream dosage forms on an oil-in-water (O/W) emulsion basis and its physical characteristics were tested. **Results:** Organoleptic tests showed that the cream was yellowish white in color, semi-solid in shape, had a characteristic smell of *Moringa* bark, and was homogeneous. The spreadability test shows results in the ideal range of 5–7 cm. The pH test shows the value in Formula I $\pm$ 5.6 and Formula II $\pm$ 6.4, Formula III $\pm$ 6.8. Cream viscosity is in the range 2000–50,000 cP. The emulsion type test shows that both formulas are O/W (oil in water) emulsion types. **Conclusion:** *Moringa* leaf extract cream (*Moringa oleifera* Lamk.) on an O/W basis in the three formulas showed physical evaluation results that met the organoleptic requirements, homogeneity, spreadability, viscosity, pH, and emulsion type, so it has the potential to be developed as a topical preparation.

Keywords: *Moringa oleifera* Lamk, Cream, Physical Test, O/W Emulsion