

INTISARI

LATIFAH, U., 2025, FORMULASI DAN UJI EFEKTIVITAS LOTION EKSTRAK ETANOL DAUN SAWI HIJAU (*Brassica Chinensis* Var *Parachinensis*) DENGAN VARIASI ASAM STEARAT DAN TRIETANOLAMIN SEBAGAI PELEMBAB PADA KULIT KELINCI, SKRIPSI, PROGRAM STUDI S1 FARMASI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA. Dibimbing oleh Dr. apt. Ika Purwidyaningrum, S.Farm., M.Sc dan apt. Dewi Ekowati S.Si., M.Sc

Kulit kering adalah kondisi ketika lapisan terluar kulit mengalami kekurangan kelembaban, menyebabkan tekstur kulit menjadi kasar dan bersisik. Daun sawi hijau (*Brassica Chinensis* Var *Parachinensis*) digunakan sebagai pelembab, kandungan senyawa fitokimia flavonoid, alkaloid, tanin dan saponin. Tujuan penelitian untuk membuktikan apakah ekstrak daun sawi hijau dapat di formulasikan dalam sediaan lotion terhadap karakteristik mutu fisik dan stabilitas yang baik, serta mengetahui formula lotion ekstrak daun sawi hijau variasi asam stearate dan trietanolamin miliki aktivitas sebagai pelembab.

Penelitian menggunakan metode maserasi dengan pelarut etanol 96%. Pembuatan lotion ekstrak daun sawi hijau dibagi menjadi beberapa variasi asam starat 3%, 4%, 5% dan trietanolamin 0,5%, 1%, 1,5%. Pengujian aktivitas kelembaban dilakukan pada punggung kelinci dengan parameter kelembaban, elastisitas dan kolagen selama 7 hari dan evaluasi mutu fisik lotion, organoleptis, homogenitas, pH, viskositas, daya lekat, daya sebar, tipe emulsi dan stabilitas. Hasil pengukuran kelembaban, elastisitas dan kolagen dilakukan dengan alat *skin analyzer* dianalisis secara statistik

Hasil yang diperoleh ekstrak daun sawi hijau dapat diformulasikan sebagai sediaan lotion. Variasi asam stearate dan trietanolamin mempengaruhi karakteristik mutu fisik dan stabilitas sediaan lotion. Sediaan lotion ekstrak etanol daun sawi hijau dengan kosentrasi asam stearate 3% dan trietanolamin 0,5% pada formula 1 memiliki aktivitas terbaik melembabkan kulit.

Kata Kunci : Daun sawi hijau, asam stearate, trietanolamin, kulit kelinci, *skin anaylzer*

ABSTRACT

LATIFAH, U., 2025, FORMULATION AND EFFECTIVENESS TEST OF GREEN MUSTARD LEAF ETHANOL EXTRACT LOTION (Brassica Chinensis Var Parachinensis) WITH VARIATIONS OF STEARIC ACID AND TRIETHANOLAMINE AS MOISTURIZER ON RABBIT SKIN, THESIS, S1 PHARMACY STUDY PROGRAM, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA. Supervised by Dr. apt. Ika Purwidyaningrum, S.Farm., M.Sc and apt. Dewi Ekowati S.Si., M.Sc

Dry skin is a condition when the outermost layer of the skin lacks moisture, causing the skin texture to become rough and scaly. Green mustard leaves (*Brassica Chinensis* Var *Parachinensis*) are used as a moisturizer, containing phytochemical compounds flavonoids, alkaloids, tannins and saponins. The purpose of the study was to prove whether green mustard leaf extract can be formulated into a lotion preparation against good physical quality characteristics and stability, and to find out the formula of green mustard leaf extract lotion with variations of stearic acid and triethanolamine which have activity as a moisturizer.

The study used the maceration method with 96% ethanol solvent. The manufacture of mustard green leaf extract lotion was divided into several variations of 3%, 4%, 5% starch acid and 0.5%, 1%, 1.5% triethanolamine. Moisture activity testing was carried out on the rabbit's back with moisture, elastic and collagen parameters for 7 days and evaluation of the physical quality of the lotion, organoleptic, homogeneity, pH, viscosity, adhesion, spreadability, emulsion type and stability. The results of moisture, elasticity and collagen measurements were carried out using a skin analyzer and analyzed statistically.

The results obtained from the extract of green mustard leaves can be formulated as a lotion preparation. Variations in stearic acid and triethanolamine affect the characteristics of the physical quality and stability of the lotion preparation. The lotion preparation of ethanol extract of green mustard leaves with a concentration of 3% stearic acid and 0,5% triethanolamine in formula 1 has the best activity in moisturizing the skin.

Keywords : Green mustard leaves, stearic acid, triethanolamine, rabbit skin, skin analyzer