

ABSTRAK

LIANA PUJI YUNIKA, 2025, FORMULASI DAN EVALUASI MUTU FISIK *FACIAL WASH GEL* EKSTRAK ETANOL DAUN BELUNTAS (*Pluchea indica* L) DENGAN VARIASI KONSENTRASI HPMC, KARYA TULIS ILMIAH, PROGRAM STUDI D-III FARMASI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI SURAKARTA. Dibimbing oleh apt. Fitri Kurniasari, S.Farm.,M.Farm

Ekstrak beluntas (*Pluchea indica* L) berkhasiat sebagai antibakteri salah satunya sebagai obat jerawat. Untuk mempermudah penggunaannya sebagai anti jerawat maka daun beluntas dapat dibuat dalam bentuk sediaan *facial wash gel* ekstrak etanol daun beluntas. Penelitian ini bertujuan untuk mengetahui pengaruh variasi konsentrasi HPMC terhadap mutu fisik sediaan *facial wash gel* ekstrak etanol daun beluntas (*Pluchea indica* L.) dan konsentrasi HPMC dalam formulasi *facial wash gel* ekstrak etanol daun beluntas yang memiliki mutu fisik paling baik.

Facial wash gel ekstrak etanol daun beluntas dibuat dalam 3 formula dengan variasi konsentrasi HPMC 0,5%, 1%, dan 1,5%. Penentuan pengaruh variasi konsentrasi HPMC dan konsentrasi HPMC terbaik dilakukan dengan pengujian sediaan yang meliputi uji organoleptis, uji homogenitas, uji pH, uji viskositas, uji daya lekat, uji daya sebar, uji daya busa, dan uji stabilitas. Hasil data dianalisis menggunakan program SPSS version 29 dengan metode Normalitas, Homogenitas, ANOVA One-Way dan Paired Sample T-test.

Hasil penelitian menunjukkan variasi konsentrasi HPMC mempengaruhi mutu fisik *facial wash gel* ekstrak etanol daun beluntas. Peningkatan konsentrasi HPMC berpengaruh terhadap viskositas dan daya lekat akan semakin meningkat sedangkan, daya sebar akan semakin menurun. Formula dengan hasil uji mutu paling baik adalah formula 2 dengan konsentrasi HPMC 1% karena memenuhi persyaratan uji mutu fisik serta uji stabilitas yang paling baik namun, tidak memenuhi uji organoleptis dan uji pH, maka perlu adanya penurunan konsentrasi zat aktif yang lebih kecil serta penambahan agen pengasam.

Kata kunci : ekstrak beluntas, *facial wash gel*, HPMC, uji mutu fisik.

ABSTRACT

LIANA PUJI YUNIKA, 2025, FORMULATION AND EVALUATION OF PHYSICAL QUALITY OF FACIAL WASH GEL FROM ETHANOL EXTRACT OF BELUNTAS LEAVES (*Pluchea indica* L) WITH VARIATION OF HPMC CONCENTRATION, SCIENTIFIC PAPER, D-III PHARMACY STUDY PROGRAM, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY OF SURAKARTA. Supervised by apt. Fitri Kurniasari, S.Farm.,M.Farm

Beluntas extract (*Pluchea indica* L.) has antibacterial properties, including as an acne medication. To facilitate its use as an anti-acne agent, pluchea leaves can be made into a facial wash gel preparation with ethanol extract of pluchea leaves. This study aims to determine the effect of varying HPMC concentrations on the physical quality of pluchea indica L. (*Pluchea indica* L.) ethanol extract facial wash gel preparations and the HPMC concentration in the pluchea indica L. ethanol extract facial wash gel formulation that has the best physical quality.

Facial wash gel ethanol extract of beluntas leaves is made in 3 formulas with variations in HPMC concentrations of 0.5%, 1%, and 1.5%. Determination of the effect of variations in HPMC concentration and the best HPMC concentration is carried out by testing the preparations which include organoleptic tests, homogeneity tests, pH tests, viscosity tests, adhesion tests, spreadability tests, foaming tests, and stability tests. The data results were analyzed using the SPSS version 29 program with the Normality, Homogeneity, One-Way ANOVA and Paired Sample T-test methods.

The results showed that variations in HPMC concentration affected the physical quality of the facial wash gel with ethanol extract of beluntas leaves. Increasing the HPMC concentration affected the viscosity and adhesiveness, which would increase, while the spreadability would decrease. The formula with the best quality test results was formula 2 with a HPMC concentration of 1% because it met the physical quality test requirements and the best stability test. However, it did not meet the organoleptic and pH tests, so it was necessary to reduce the concentration of the active substance and add an acidifying agent.

Keywords: beluntas extract, facial wash gel, HPMC, physical quality test.