ABSTRAK

FORMULASI *FACIAL WASH GEL* EKSTRAK ETANOL 70% DAUN BALIK ANGIN (*Alphitonia incana* (Roxb) Teijism & Binn.Ex Kurz) DAN AKAR KELAKAI (*Stenochlaena palutris* (Burm F) Bedd) MENGGUNAKAN VARIASI NA-CMC (Oleh Risna Liya Agustin; Pembimbing Dyera Forestryana dan Wahyudin Bin Jamaludin ; 2024; 144 Halaman)

Ekstrak etanol 70% daun Balik Angin berpotensi sebagai antibakteri yang memiliki diameter zona hambat 9,61 mm dan ekstrak etanol 70% akar kelakai yang tumbuh pada tanah gambut memiliki nilai IC_{50} sebesar 19,06 ppm. Kombinasi dua bahan alam tersebut dapat diformulasikan dalam sediaan *facial wash gel* dengan variasi Na-CMC. Penelitian ini bertujuan untuk mengetahui pengaruh variasi Na-CMC terhadap karakteristik fisik sediaan *facial wash gel* kombinasi ekstrak akar Kelakai dan daun Balik Angin serta menentukan formula mana yang paling optimal. Ekstraksi pada daun Balik Angin menggunakan soxlet dengan etanol 70% dan pada akar Kelakai menggunakan maserasi dengan etanol 70%. *Facial wash gel* divariasikan *gelling egent* (Na-CMC) menjadi 5 formula. *Facial wash gel* dievaluasi karakteristik fisik dan stabilitasnya serta kemampuan daya bersihnya. Hasil pengujian berupa sediaan stabil coklat tua kehitaman, berbau khas vanilla, gel, homogenitas stabil, memiliki pH bernilai 5,67-5,87, daya bersih bernilai 24,23%-31,79%, viskositas bernilai 633-16.933 cPs, dan tinggi busa bernilai 3,5-5,6 cm. Seluruh hasil evaluasi memenuhi persyaratan SNI, kecuali pada uji daya bersih F5 didapat nilai persen daya bersih 31,79 % yang melebihi persyaratan sabun cair yaitu 18% – 30%. Pada uji organoleptis bentuk sediaan pada F1,F2 dan F3 juga tidak membentuk gel. Kesimpulannya yaitu formula 4 yang menjadi formula optimal karena memenuhi persyaratan organoleptis, homogenitas, rentang pH 5,82, tinggi busa 5,6 cm, viskositas sebesar 16.367 cPs, bobot jenis 1,0324 g/mL, dan daya bersih 29,94% yang memenuhi persyaratan evaluasi fisik.

Kata kunci: Balik Angin (*Alphitonia incana*), Kelakai (*Stenochlaena palutris*), Formulasi, Na-CMC, *Facial wash gel*

ABSTRACT

FACIAL WASH GEL FORMULATION OF 70% ETHANOL EXTRACT LEAVES OF BALIK ANGIN (Alphitonia incana (Roxb) Teijism & Binn.Ex Kurz) AND ROOTS KELAKAI (Stenochlaena palutris (Burm F) Bedd) USING NA-CMC VARIATIONS (By Risna Liya Agustin; Supervisor Dyera Forestryana and Wahyudin Bin Jamaludin; 144 pages)

Balik Angin leaf of 70% ethanol extract has the potential as an antibacterial which has an inhibition zone diameter of 9.61 mm and 70% ethanol extract of kelakai root growing on peat soil has an IC50 value of 19.06 ppm. The combination of these two natural ingredients can be formulated in facial wash gel preparations with Na-CMC variations. This study aims to determine the effect of Na-CMC variations on the physical characteristics of facial wash gel preparations combined with Kelakai root extract and Balik Angin leaf and determine which formula is the most optimal. Extraction on Balik Angin leaves uses soxlet with 70% ethanol and on Kelakai roots uses maceration with 70% ethanol. Facial wash gel is varied into 5 formulas. Facial wash gel is evaluated for its physical characteristics and stability as well as its cleansing ability. The test results were in the form of a blackish dark brown stable preparation, with a distinctive vanilla odor, gel, stable homogeneity, pH value of 5.67-5.87, net power of 24.23%-31.79%, viscosity of 633-16,933 cPs, and foam height of 3.5-5.6 cm. All evaluation results met the SNI requirements, except for the F5 clean power test, a net power percentage value of 31.79% was obtained which exceeded the liquid soap requirement of 18% – 30%. In the organoleptis test, the dosage form on F1, F2 and F3 also did not form a gel. The conclusion is that formula 4 is the optimal formula because it meets the requirements of organoleptics, homogeneity, pH range 5.82, foam height 5.6 cm, viscosity of 16,367 cPs, specific weight of 1.0324 g/mL, and net power of 29.94% which meets the requirements of physical evaluation.

Keywords: *Balik Angin (Alphitonia incana), Kelakai (Stenochlaena palutris), Formulation, Na-CMC, Facial wash gel*