

ABSTRAK

PENGARUH KONSENTRASI EKSTRAK BUAH MENGGUDU (*Morinda citrifolia L*) TERHADAP KARAKTERISTIK SABUN TRANSPARAN

Oleh

IKHWAN KURNIADI

Tujuan penelitian ini yaitu untuk mengetahui konsentrasi ekstrak buah mengkudu (*Morinda citrifolia L.*) dalam pembuatan sabun transparan dengan sifat sensori dan sifat kimia terbaik berdasarkan SNI 3532:2016. Penelitian disusun dalam Rancangan Acak Lengkap (RAL) dengan satu faktor dalam 3 kali ulangan. Konsentrasi ekstrak buah mengkudu pada penelitian ini yaitu 10%, 12%, 14%, 16% dan 18%. Ekstrak buah mengkudu hasil maserasi dengan pelarut ethanol diambil 9 ml untuk di gunakan dalam pembuatan sabun transparan. Sabun transparan dibuat dengan menggunakan bahan *Virgin coconut oil* (VCO), NaOH, Asam stearate, Gliserin, Gula pasir ravinasi, dan aquades. Hasil penelitian menunjukkan bahwa sabun transparan dengan perlakuan penambahan konsentrasi ekstrak buah mengkudu (*Morinda Citrifolia L*) 16% (P4) menghasilkan karakteristik sabun transparan terbaik dengan skor tekstur 2,66 (agak lunak), skor aroma 3,25 (agak beraroma khas mengkudu), skor warna 3,95 (suka), transparansi 3,95 (suka), dan penerima keseluruhan 3,91 (suka). Perlakuan terbaik ini juga memiliki karakteristik fisik antara lain pH 8,67, tinggi busa 80,60 % dan kadar air 20,09%, nilai asam lemak bebas sebesar 0,85-1,54% dan memiliki daya hambat *Staphylococcus aureus* terbaik berdasarkan uji metode difusi cakram dengan zona hambar sebesar 9,250 mm yang telah sesuai dengan SNI 3532:2016.

Kata kunci: sabun transparan, ekstrak mengkudu, *virgin coconut oil*, *Staphylococcus aureus*, metode difusi cakram

ABSTRACT

EFFECT OF NONI (*Morinda citrifolia L*) FRUIT EXTRACT CONCENTRATION ON THE CHARACTERISTICS OF TRANSPARENT SOAP

By

IKHWAN KURNIADI

*The purpose of this study was to determine the concentration of noni fruit extract (*Morinda citrifolia L.*) in the manufacture of transparent soap with the best sensory and chemical properties based on SNI 3532:2016. The study was arranged in a completely randomized design (CRD) with one factor in 3 replications. The concentration of noni fruit extract in this study were 10%, 12%, 14%, 16% and 18%. The extract of noni fruit from maceration with ethanol solvent was taken 9 ml to be used in making transparent soap. Transparent soap is made using virgin coconut oil (VCO), NaOH, stearic acid, glycerin, refined granulated sugar, and aquades. The results showed that transparent soap treated with the addition of 16% noni fruit extract (*Morinda Citrifolia L*) (P4) produced the best transparent soap characteristics with a texture score of 2.66 (slightly soft), aroma score of 3.25 (slightly distinctive noni aroma), color score 3.95 (likes), transparency 3.95 (likes), and overall receivership 3.91 (likes). This best treatment also had physical characteristics, including pH 8.67, foam height 80.60% and water content 20.09%, free fatty acid value 0.85-1.54% and had the best *Staphylococcus aureus* inhibition based on the test. disc diffusion method with a bland zone of 9.250 mm which is in accordance with SNI 3532:2016*

Keywords: transparent soap, noni extract, virgin coconut oil, *Staphylococcus aureus*, disc diffusion method