

ABSTRACT

THE EFFECT OF ADDED CONCENTRATION OF NONI EXTRACT (*Morinda citrifolia*) AND HONEY ON PHYSICAL AND SENSORY PROPERTIES OF HERBAL HONEY NONI SOAP

By

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This study aims to determine the optimum concentration of noni fruit extract and honey in the manufacture of noni herbal honey soap with the best sensory and physical properties according to the quality standard of SNI-3532-2016. This study was arranged in a completely randomized group design (RAKL) with 3 replications and 2 factors, namely noni fruit extract K0 (0%), K1 (10%), K2 (15%) and K3 (20%), and the concentration of honey M1 (5%) and M2 (7.5%) (w/v). The data obtained were analyzed for variance and further analyzed with the further test of Orthogonal Polynomial – Orthogonal Contrast at the level of 5% . The results showed that the addition of the concentration of noni fruit extract had a significant effect on all physical and sensory test parameters of noni herbal honey soap. The addition of honey concentration significantly affected all sensory test parameters of herbal honey noni soap but did not significantly affect the water content of noni herbal honey soap. The interaction between the two had a

significant effect on the pH and stability of the noni herbal honey soap foam but had no significant effect on the water content, free alkali content, unsaponifiable fat, and all sensory test parameters. Based on the results of the study, the concentration of noni fruit extract 10% (v/v) and honey 7.5% (w/v) produced the best solid soap characteristics with pH 8.64, foam stability 92.83%, and free alkali content of 0.53%. which is in accordance with the SNI-3532-2016 standard as well as a sensory assessment of yellowish white color, slightly noni fruit aroma, soft texture, and overall acceptance favored by the panelists.

Keywords : *Solid soap, noni fruit extract, honey concentration*

ABSTRAK

PENGARUH PENAMBAHAN KONSENTRASI EKSTRAK BUAH MENGKUDU (*Morinda citrifolia*) DAN MADU TERHADAP SIFAT FISIK DAN SENSORI SABUN NONI MADU HERBAL

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Penelitian ini bertujuan untuk mengetahui konsentrasi ekstrak buah mengkudu dan madu yang optimum dalam pembuatan sabun noni madu herbal dengan sifat sensori dan sifat fisik terbaik sesuai standar mutu SNI-3532-2016. Penelitian ini disusun dalam rancangan acak kelompok lengkap (RAKL) dengan 3 ulangan dan 2 faktor yaitu ekstrak buah mengkudu K0 (0%), K1 (10%), K2 (15%) dan K3 (20%), dan konsentrasi madu M1 (5%) dan M2 (7,5%) (b/v). Data yang diperoleh dianalisis ragam dan dianalisis lebih lanjut dengan uji lanjut *Orthogonal Polynomial – Orthogonal Contrast* pada taraf 5%. Hasil penelitian menunjukkan bahwa penambahan konsentrasi ekstrak buah mengkudu berpengaruh nyata terhadap seluruh parameter uji fisik dan sensori sabun noni madu herbal. Penambahan konsentrasi madu berpengaruh nyata terhadap seluruh parameter uji sensori sabun noni madu herbal namun tidak berpengaruh nyata terhadap kadar air sabun noni madu herbal. Interaksi keduanya berpengaruh nyata terhadap pH dan stabilitas busa sabun noni madu herbal namun tidak berpengaruh nyata terhadap

kadar air, kadar alkali bebas, lemak tidak tersabunkan, dan seluruh paramter uji sensori. Berdasarkan hasil penelitian konsentrasi ekstrak buah mengkudu 10% (v/v) dan madu 7,5% (b/v) menghasilkan karakteristik sabun padat terbaik dengan pH 8,64, stabilitas busa 92,83% , dan kadar alkali bebas 0,53 yang sesuai standar SNI-3532-2016 serta penilaian sensori warna putih kekuningan, agak beraroma buah mengkudu, tekstur lunak, dan penerimaan keseluruhan yang disukai oleh panelis.

Kata kunci : *Sabun padat , ekstrak buah mengkudu, konsentrasi madu*