

ABSTRAK

Kualitas Sabun dipengaruhi oleh Suhu Pemanasan pada proses pembuatannya dikarenakan salah satu faktor yang mempengaruhi laju reaksi. Penambahan ekstrak buah pinang sebagai antiseptik menambah nilai manfaatnya. Penelitian ini bertujuan untuk mengetahui Pengaruh Suhu Pemanasan terhadap Kualitas Sabun Mandi Cair Berbahan Baku Campuran Minyak Jelantah Kelapa Sawit yang sudah dimurnikan Dan Ekstrak Buah Pinang (*Areca catechu L*). Penelitian ini memakai metode Rancangan Acak Lengkap (RAL) yang terdiri dari 4 perlakuan dan 5 ulangan. Perlakuan dalam penelitian ini adalah Suhu Pemanasan yakni : A1 : Suhu 40°C, A2 : Suhu 60°C, A3 : Suhu 80°C dan A4 : Suhu 100 °C. Data Penelitian dianalisis dengan *Analysis of Variance* (ANOVA) dan uji lanjut Tukey HSD memakai software SPSS versi 22.0. Hasil penelitian menunjukkan bahwa suhu pemanasan memiliki pengaruh nyata dalam menentukan kualitas sabun cair berbahan baku minyak jelantah kelapa sawit terhadap organoleptic, pH, Bilangan Penyabunan, Tinggi Busa dan Kadar air. Hasil terbaik terdapat pada Perlakuan A₄ Suhu 100°C, dengan rata-rata pH standar 10,92, tinggi busa 12 cm, stabilitas busa 84%, kadar air 45,80%, bilangan penyabunan 78,54 dan sudah memenuhi standar untuk sabun mandi cair (Standar Nasional Indonesia 06 – 3235- 1994).

Kata kunci: *Minyak Jelantah, Suhu Pemanasan, Sabun mandi cair*

ABSTRACT

Soap quality is influenced by the heating temperature in the manufacturing process due to one of the factors that affect the reaction rate. The addition of betel nut extract as an antiseptic adds to the value of its benefits. This study aims to determine the effect of heating temperature on the quality of liquid bath soap made from a mixture of purified waste cooking oil and areca nut (Areca catechu L) extract. This study used a completely randomized design (CRD) method which consisted of 4 treatments and 5 replications. The treatments in this study were heating temperatures, namely: A1: 40°C, A2: 60C, A3: 80°C and A4: 100C. Research data were analyzed by Analysis of Variance (ANOVA) and Tukey HSD further test using SPSS software version 22.0. The results showed that the heating temperature had a significant effect in determining the quality of liquid soap made from used cooking palm oil on organoleptic, pH, Saponification Number, Foam Height and Water Content.. The best results were found in Treatment A4 Temperature 100°C, with an average standard pH of 10.92, foam height 12 cm, foam stability 84%, water content 45.80%, saponification number 78.54 and has met the standard for liquid bath soap (Indonesian National Standard 06 – 3235-1994).

Keyword: *cooking oil, heating temperature, liquid bath soap*