

ABSTRAK

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Judul : Formulasi Sabun Mandi Cair dan Uji Aktivitas Antibakteri dari Limbah Biji Pepaya (*Carica papaya* L.)

Sabun mandi cair merupakan sediaan pembersih kulit yang dibuat dari bahan aktif deterjen sintetik dan atau dari proses saponifikasi atau netralisasi dari lemak, minyak, lilin, rosin atau asam dengan basa organik atau anorganik tanpa menimbulkan iritasi pada kulit. Tujuan penelitian ini adalah untuk memformulasi, serta mengetahui formula, evaluasi mutu, stabilitas dan aktivitas antibakteri pada sabun mandi cair dari limbah biji pepaya (*Carica papaya* L.). Sabun mandi cair mengandung ekstrak biji pepaya 20%, TEA 4%, SLS 1%, cocoamidopropil betain 1%, asam sitrat 1,5%, sukrosa 5%, HPMC 1%, parfum secukupnya dan aquadest sampai 100%. Evaluasi mutu sabun mandi cair yang dilakukan meliputi uji organoleptik, pemeriksaan bobot jenis, uji tinggi busa dan stabilitas busa, uji viskositas dan sifat alir, uji pH, serta uji homogenitas. Uji stabilitas yang dilakukan adalah *cycling test* dan uji mekanik. Uji aktivitas antibakteri dilakukan dengan metode difusi cakram pada media *Mueller Hinton Agar* (MHA) terhadap bakteri *Staphylococcus aureus* dan *Escherichia coli*. Hasil penelitian menunjukkan bahwa sabun mandi cair memiliki evaluasi mutu yang sesuai dengan persyaratan, kecuali pada uji viskositasnya. Menghasilkan sabun mandi cair yang stabil tetapi terjadi penurunan viskositas dan perubahan sifat alir serta tidak memberikan aktivitas antibakteri karena tidak terbentuknya Diameter Daya Hambat (DDH) terhadap bakteri *S. aureus* dan *E. coli*.

Kata kunci:

Antibakteri, *Carica papaya* L., Evaluasi mutu, Sabun mandi cair, Stabilitas

ABSTRACT

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Title : *Liquid Bath Soap Formulation and Antibacterial Activity Test from Papaya Seed Waste (Carica papaya L.)*

Liquid bath soap is a skin cleansing preparation made from the active ingredients of synthetic detergents and or from the saponification or neutralization process of fats, oils, waxes, rosin or acids with organic or inorganic bases without causing irritation to the skin. The purpose of this study was to formulate, as well as determine the formula, evaluate the quality, stability and antibacterial activity of liquid bath soap from papaya seed waste (Carica papaya L.). The liquid bath soap contains 20% papaya seed extract, 4% TEA, 1% SLS, 1% cocoamidopropyl betaine, 1.5% citric acid, 5% sucrose, 1% HPMC, perfume to taste and aquadest up to 100%. The evaluation of the quality of the liquid bath soap included organoleptic tests, specific gravity tests, foam height and foam stability tests, viscosity and flow properties tests, pH tests, and homogeneity tests. Stability tests carried out are cycling test and mechanical test. Antibacterial activity test was carried out by disc diffusion method on Mueller Hinton Agar (MHA) media against Staphylococcus aureus and Escherichia coli bacteria. The results showed that the liquid bath soap had a quality evaluation that was in accordance with the requirements, except for the viscosity test. Produces liquid bath soap which is stable but there is a decrease in viscosity and changes in flow properties and does not provide antibacterial activity due to the absence of Inhibitory Diameter against S. aureus and E. coli bacteria.

Keywords:

Antibacterial, Carica papaya L., Liquid bath soap, Quality evaluation, Stability