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Skripsi, Februari 2020  
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**FORMULASI DAN UJI AKTIVITAS ANTIBAKTERI SABUN CAIR  
EKSTRAK ETANOL BIJI PINANG (*Areca catechu L*) TERHADAP  
*Propionibacterium acnes*  
(xvi+ 74 halaman + 11 gambar + 5 bagan + 16 tabel+ 9 lampiran)**

**ABSTRAK**

**Latar belakang:** Biji Pinang (*Areca catechu L*) mengandung senyawa kimia flavonoid yang dipercaya memiliki aktivitas sebagai antibakteri. Peningkatan aktivitas Biji Pinang (*Areca catechu L*) sebagai antibakteri dapat dibuat formulasi dalam bentuk sediaan sabun cair. Tujuan umum penelitian ini adalah untuk menganalisis aktivitas antibakteri sabun cair ekstrak biji pinang (*Areca catechu L*).

**Metode:** Jenis penelitian yang digunakan adalah penelitian eksperimental dengan metode sumuran terhadap bakteri *Propionibacterium acnes* menggunakan 5 kelompok perlakuan. Kontrol positif Sabun Pompia Sereh, kontrol negatif basis sabun cair, formula 1 konsentrasi 1,5%, formula 2 konsentrasi 3%, formula 3 konsentrasi 4,5%. Ditunjukkan dengan adanya zona hambat disekitar sumuran. Pada uji stabilitas *Antibacterial liquid soap* dilihat dari uji organoleptis dan homogenitas, uji pH, uji daya busa dan uji viskositas.

**Hasil:** Pada uji organoleptis dan homogenitas, pH, daya busa dan viskositas selama 28 hari menunjukkan bahwa *Antibacterial liquid soap* stabil. Aktivitas antibakteri ekstrak biji pinang dalam formulasi sabun cair *Propionibacterium acnes* digolongkan tidak terdapat aktivitas antibakteri pada kontrol negatif, aktivitas antibakteri kuat pada konsentrasi 1,5%, 3%, 4,5% dan pada kontrol positif dilihat dari diameter zona hambat berturut-turut sebesar 14,15 mm, 16,91 mm, 19,99 mm dan 19,28 mm yang masuk kedalam kategori kuat.

**Kesimpulan:** *Antibacterial liquid soap* ekstrak biji pinang (*Areca catechu L*) memiliki aktivitas antibakteri terhadap bakteri *Propionibacterium acnes* dan stabilitas fisik yang baik.

**Kata kunci** : *Areca catechu L*, *antibacterial liquid soap*, *Propionibacterium acnes*.

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Final Assignment, February 2020  
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**THE FORMULATION AND ACTIVITY TEST OF ANTIBACTERIAL LIQUID SOAP MADE FROM PURIFIED EXTRACT OR ARECA (*Areca catechu L*) SEEDS ON *Propionibacterium acnes* (xvi + 74 pages + 11 images + 5 Chart + 16 tables + 9 attachments)**

**ABSTRACT**

**Background:** Areca (*Areca catechu L*) seeds contain flavonoid chemical compounds which are believed to have antibacterial activity. Increasing the activity of *Areca Catechu L* as an antibacterial can be made in the form of liquid soap preparations. The general objective of this study was to analyze the antibacterial activity of Areca (*Areca catechu L*) liquid soap.

**Method:** The type of research used an experimental study with a welling method to ward *Propionibacterium acnes* bacteria using 5 treatment groups: positive control of *Pompia Lemongrass Soap*, negative control of liquid soap base, formula 1 concentration 1.5%, formula 2 concentration 3%, formula 3 concentration 4.5% shown by the inhibition zone around the well. The Antibacterial liquid soap stability test was seen from the organoleptic and homogeneity test, pH test, foam power test and viscosity test.

**Results:** In the organoleptic and homogeneity test, pH, foam strength and viscosity for 28 days showed that Antibacterial liquid soap was stable. The antibacterial activity of Areca seeds extract in liquid soap formulation *Propionibacterium acnes* was classified as not having antibacterial activity in negative controls, strong antibacterial activity at concentrations of 1.5%, 3%, 4.5% and in positive control seen from the diameter of inhibitory zones respectively 14.15 mm, 16.91 mm, 19.99 mm and 19.28 mm included in the strong category.

**Conclusion:** Antibacterial liquid soap of Areca seeds extract (*Areca catechu L*) has antibacterial activity against *Propionibacterium acnes* and good physical stability.

Keywords: *Areca catechu L*, antibacterial, liquid soap formulation, *Propionibacterium acnes*.