

Universitas Ngudi Waluyo
Program Studi S1 Farmasi
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Budi Hartadi Nurrbahari
050115A015

**FORMULASI DAN UJI AKTIVITAS ANTIBACTERIAL LIQUID SOAP
EKSTRAK DAUN BELUNTAS (*Pluchea Indica* L.) TERHADAP BAKTERI
*Staphylococcus epidermidis***

(103 halaman + 15 gambar + 32 tabel + 9 lampiran)

ABSTRAK

Latar belakang : *Acne vulgaris* adalah penyakit inflamasi kronik unit pilosebaceus yang ditandai dengan komedo, papul, pustul, nodul dan kista yang dapat mengakibatkan terjadinya skar dan perubahan pigmen. Daun Beluntas (*Pluchea indica* L.) mengandung senyawa kimia flavonoid yang dipercaya memiliki aktivitas sebagai antibakteri. Peningkatan aktivitas daun beluntas (*Pluchea indica* L.) sebagai antibakteri dapat dibuat formulasi dalam bentuk sediaan sabun cair.

Tujuan : Tujuan umum penelitian ini adalah untuk mengetahui aktivitas antibakteri sabun cair ekstrak daun beluntas (*Pluchea indica* L.) terhadap *Staphylococcus epidermidis*.

Metode: Jenis penelitian yang digunakan adalah penelitian eksperimental dengan metode *disc difusion* terhadap bakteri *Staphylococcus epidermidis* menggunakan 5 kelompok perlakuan. Kontrol positif Sabun Jf Sulfurfamily body wash, kontrol negatif basis sabun cair, formula 1 konsentrasi 1%, formula 2 konsentrasi 3%, formula 3 konsentrasi 5%. Uji aktivitas antibakteri menggunakan metode difusi cakram.

Hasil: *Antibacterial liquid soap* ekstrak daun beluntas (*Pluchea indica* L.) dengan konsentrasi 1%, 3%, dan 5% dapat menghambat bakteri *Staphylococcus epidermidis*. Aktivitas antibakteri ekstrak daun beluntas dalam formulasi sabun cair terhadap *Staphylococcus epidermidis* digolongkan tidak terdapat aktivitas antibakteri pada kontrol negatif, aktivitas antibakteri sedang pada konsentrasi 1% dengan rata-rata diameter daya hambat 1,470 cm, aktivitas antibakteri kuat pada konsentrasi 3% dan 5% dengan nilai rata rata 2,525 cm, 3,137 cm dan pada kontrol positif dengan nilai rata rata 3,888 cm.

Kesimpulan : *Antibacterial liquid soap* ekstrak daun beluntas (*Pluchea indica* L.) memiliki aktivitas antibakteri terhadap bakteri *Staphylococcus epidermidis* dan stabilitas fisik yang baik.

Kata kunci : Daun beluntas, *antibacterial liquid soap*, *Staphylococcus epidermidis*.

Kepustakaan : 84 (1968-2018)

Universitas Ngudi Waluyo
S1 Pharmacy Study Program
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Budi Hartadi Nurbahari
050115A015

FORMULATION AND ACTIVITY TEST OF ANTIBACTERIAL LIQUID SOAP OF *BELUNTAS LEAF EXTRACT (Pluchea indica L.)* AGAINST *Staphylococcus epidermidis* BACTERIA

(106 pages + 15 pictures + 32 tables+ 9 attachments)

ABSTARCT

Background: Acne vulgaris is a chronic inflammatory disease of the pilosebaceous unit characterized by blackheads, papules, pustules, nodules and cysts that can cause scars and pigment changes. Beluntas (*Pluchea indica L.*) leaves contain flavonoid chemical compounds that are believed to have antibacterial activity. Increased activity of beluntas (*Pluchea indica L.*) leaves as an antibacterial can be made in the form of liquid soap preparations.

Aim: The general objective of this study was to determine the antibacterial activity of beluntas (*Pluchea indica L.*) liquid soap extracts against *Staphylococcus epidermidis*.

Method: This type of research is an experimental study with a disc diffusion method for the *Staphylococcus epidermidis* bacteria using 5 treatment groups. The Positive control was Jf Sulfur family body wash, the negative control was liquid soap base, the formula 1 concentration was 1%, the formula 2 concentration was 3%, the formula 3 concentration was 5%. Antibacterial activity test used the disk diffusion method.

Result: Antibacterial liquid soap of beluntas (*Pluchea indica L.*) leaf extract with concentrations of 1%, 3%, and 5% can inhibit the bacterium *Staphylococcus epidermidis*. Antibacterial activity of beluntas leaf extract in liquid soap formulations against *Staphylococcus epidermidis* was classified as no antibacterial activity in negative controls, moderate antibacterial activity at a concentration of 1% with an average diameter of inhibition of 1.470cm, strong antibacterial activity at a concentration of 3% and 5% with an average diameter of inhibition of 2.525 cm, 3.137 cm and the positive control with an average diameter of inhibition of of 3.888 cm.

Conclusion: Antibacterial liquid soap from beluntas (*Pluchea indicaL.*) leaf extract has antibacterial activity against *Staphylococcus epidermidis* bacteria and physical stability is not good.

Keywords: *Beluntas* leaf, antibacterial liquid soap, *Staphylococcus epidermidis*.

Literatures: 84 (1968-2018)