

ABSTRAK

FORMULASI DAN EVALUASI SEDIAAN SABUN MANDI CAIR ANTIJerawat DARI KOMBINASI EKSTRAK PEGAGAN (*Centella asiatica* (L.) Urban) DAN EKSTRAK KUNYIT (*Curcuma domestica* Val) TERHADAP BAKTERI *Propionibacterium acnes*

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Jerawat tidak hanya muncul di wajah tetapi dapat tumbuh juga di bagian tubuh lain seperti lengan atas, dada, dan punggung bagian atas. Pegagan (*Centella asiatica* (L.) Urban) dan kunyit (*Curcuma domestica* Val) merupakan tanaman yang memiliki aktivitas antijerawat. Tujuan penelitian ini untuk membuat formulasi dan mengetahui formulasi sabun mandi cair antijerawat kombinasi ekstrak pegagan dan kunyit yang memiliki stabilitas yang paling baik dan memiliki aktivitas terhadap bakteri *Propionibacterium acnes*. Aktivitas antibakteri dilakukan dengan metode difusi agar (*Kirby Baurer*). Hasil semua evaluasi sabun mandi cair memenuhi syarat SNI dengan hasil uji organoleptik berbentuk cair, beraroma *cherry blossom* dan berwarna kuning (F1), Hijau (F2), coklat (F3, F4 dan F5). Hasil uji pH menunjukkan nilai pH tertinggi 8,40 (F0) dan terendah 6,03 (F2). Hasil uji viskositas tertinggi 3756 Cp (F0) dan terendah 856 Cp (F1). Hasil uji stabilitas busa tertinggi 94,5% (F2) dan terendah 90,5% (F1). Hasil bobot jenis tertinggi 1,098 (F2) dan terendah 1,04 (F3). Hasil statistik menunjukkan seluruh formula memiliki reproduktibilitas yang baik ($P > 0,05$). Uji stabilitas *Cycling test* menunjukkan perbedaan bermakna ($p < 0,05$) pada pH dan viskositas selama 6 siklus, namun masih memenuhi persyaratan SNI. Formula 4 dan 5 memiliki stabilitas yang paling baik karena uji viskositasnya tidak terdapat perbedaan bermakna ($P > 0,05$). Aktivitas antibakteri tertinggi ditunjukkan oleh F4 dengan diameter zona hambat 16 ± 1.4 mm.

Kata kunci : Antijerawat, *Curcuma*, *Centella*, Sabun mandi cair, *Propionibacterium acnes*

ABSTRACT

FORMULATION AND EVALUATION OF BODY WASH ANTI-ACNE FROM COMBINATION OF GOTU KOLA EXTRACT (*Centella asiatica* (L.) Urban) AND TURMERIC EXTRACT //(Curcuma domestica Val) AGAINST *Propionibacterium acnes* BACTERIA

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Acne does not only appear on the face but can also grow on other parts of the body such as the upper arms, chest and upper back. Pegagan (*Centella asiatica* (L.) Urban) and turmeric (*Curcuma domestica* Val) are plants that have anti-acne activity. The purpose of this study was to formulate and find out the formulation of an anti-acne liquid bath soap combination of gotu kola and turmeric extract which had the best stability and had activity against *Propionibacterium acnes* bacteria. Antibacterial activity was carried out using the agar diffusion method (Kirby Baurer). The results of all liquid bath soap evaluations met SNI requirements with organoleptic test results in the form of liquid, cherry blossom scent and yellow (F1), green (F2), brown (F3, F4 and F5) colors. The pH test results showed the highest pH value was 8.40 (F0) and the lowest was 6.03 (F2). The highest viscosity test results were 3756 Cp (F0) and the lowest were 856 Cp (F1). The highest foam stability test results were 94.5% (F2) and the lowest were 90.5% (F1). The highest specific gravity was 1.098 (F2) and the lowest was 1.04 (F3). Statistical results showed that all formulas had good reproducibility ($P > 0.05$). Stability test Cycling test showed a significant difference ($p < 0.05$) in pH and viscosity for 6 cycles, but still met the requirements of SNI. Formulas 4 and 5 have the best stability because there is no significant difference in the viscosity test ($P > 0.05$). The highest antibacterial activity was shown by F4 with an inhibition zone diameter of 16 ± 1.4 mm.

Keywords: Anti-acne, Curcuma, Centella, body wash, *Propionibacterium acnes*