

ABSTRAK

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FORMULASI SEDIAAN *ESSENCE* EKSTRAK ETANOL 96% DAUN TEMBELEKAN (*Lantana camara* Linn.) DAN UJI AKTIVITAS ANTIBAKTERI TERHADAP BAKTERI *Staphylococcus aureus*
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(xv + 61 halaman; 24 tabel; 11 gambar; 8 lampiran)

Bahan alam memiliki potensi untuk dieksplorasi dalam pencarian senyawa yang memiliki khasiat antibakteri dan dikembangkan menjadi berbagai macam sediaan. Salah satu tanaman yang diketahui memiliki aktivitas antibakteri adalah daun tembelean (*Lantana camara* Linn.). Daun tembelean dimaserasi menggunakan pelarut etanol 96% dan menghasilkan rendemen ekstrak sebanyak 8,07%. Ekstrak kemudian diformulasi menjadi sediaan kosmetik berjenis *essence*. Sediaan *essence* dibuat menjadi 4 formula dengan variasi dosis ekstrak yaitu formulasi 1 (0,5%); formulasi 2 (0,8%); formulasi 3 (1%); formulasi 4 (2%). Selanjutnya dilakukan evaluasi terhadap sediaan *essence* yang meliputi evaluasi fisik, uji anti bakteri terhadap bakteri *Staphylococcus aureus* serta uji stabilitas selama 10 hari pada suhu ruang dalam lemari penyimpanan. Evaluasi fisik meliputi uji organoleptik, homogenitas, pH, bobot jenis, viskositas dan daya sebar. Sediaan *essence* didapatkan hasil memenuhi syarat uji fisik sediaan. Hasil uji aktivitas antibakteri didapatkan bahwa ekstrak daun tembelean memiliki aktivitas antibakteri. Rerata zona hambat yang dihasilkan yaitu F1 (18,45 mm;Kuat), F2 (21,59 mm;Sangat kuat), F3 (22,98 mm;Sangat Kuat), F4 (26,61 mm;Sangat Kuat). Didapatkan juga kesetaraan ekstrak dengan antibiotik dengan hasil F1 (5000 ppm) memiliki zona hambat sebesar 18,45 mm setara dengan antibiotik konsentrasi 60 ppm. F2 (8000 ppm) memiliki zona hambat sebesar 21,59 mm setara dengan antibiotik konsentrasi 80 ppm. F3 (10.000 ppm) memiliki zona hambat sebesar 22,98 mm setara dengan antibiotik konsentrasi 100 ppm. F4 (20.000 ppm) memiliki zona hambat sebesar 26,61 mm setara dengan antibiotik konsentrasi lebih dari 100 ppm. Hasil uji stabilitas didapatkan bahwa keempat formulasi stabil selama penyimpanan hari ke-0 dan ke-5. Sedangkan, pada hari ke-10 sediaan mengalami penurunan viskositas. Sehingga pada penelitian ini dapat disimpulkan bahwa, formulasi sediaan *essence* pada keempat formula telah memenuhi syarat uji fisik, uji antibakteri dan uji stabilitas sediaan.

Kata Kunci: daun tembelean (*Lantana camara* Linn.), antibakteri, formulasi *essence*, anti jerawat.

Referensi: 34 (1979–2021)

ABSTRACT

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FORMULATION OF ESSENCE PREPARATION OF 96% ETHANOL EXTRACT LEAVES OF TEMBELEKAN (*Lantana camara* Linn.) AND ANTIBACTERIAL ACTIVITY TEST AGAINST *Staphylococcus aureus*

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*Natural ingredients have the potential to be explored in compounds that have antibacterial properties and are developed into various preparations. One of the plants known to have antibacterial activity is tembelekan leaf (*Lantana camara* Linn.). Tembelekan leaves were macerated using 96% ethanol as a solvent and yielded an extract yield of 8.07%. The extract is then formulated into an essence-type cosmetic preparation. Essence preparations were made into 4 formulas with various extract doses, namely formulation 1 (0.5%); formulation 2 (0.8%); formulation 3 (1%); formulation 4 (2%). Furthermore, the evaluation of the essence preparation includes a physical evaluation, *Staphylococcus aureus* antibacterial test, and a test for 10 days at room temperature in a storage cupboard. Physical evaluation includes organoleptic tests, homogeneity, pH, specific gravity, viscosity, and spreadability. Essence preparations get results that meet the requirements of the physical test of the preparation. The results of the antibacterial activity test showed that tembelekan leaf extract had antibacterial activity. The average inhibition zones produced were F1 (18.45 mm; Strong), F2 (21.59 mm; Very Strong), F3 (22.98 mm; Very Strong), and F4 (26.61 mm; Very Strong).). The antibiotic extract was also obtained with the results of F1 (5000 ppm) having an inhibition zone of 18.45 mm, equivalent to an antibiotic concentration of 60 ppm. F2 (8000 ppm) has an inhibition zone of 21.59 mm, equivalent to an antibiotic concentration of 80 ppm. F3 (10,000 ppm) has an inhibition zone of 22.98 mm, equivalent to an antibiotic with a concentration of 100 ppm. F4 (20,000 ppm) has an inhibition zone of 26.61 mm equivalent to an antibiotic concentration of more than 100 ppm. The test results showed that the four formulations were stored on the 0th and 5th days. While on the 10th day there was a decrease in viscosity. So in this study, it can be ascertained that the essence formulations in the four formulas have met the requirements of physical, antibacterial, and preparation tests.*

*Keywords: tembelekan leaf (*Lantana camara* Linn.), antibacterial, essence formulation, anti-acne.*

References: 34 (1979–2022)