

**UJI AKTIVITAS ANTIBAKTERI GEL EKSTRAK ETANOL DAUN BALAKACIDA
(*Chromolaena odorata L.*) TERHADAP BAKTERI *Staphylococcus aureus* dan *Staphylococcus epidermidis***

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Abstrak

Staphylococcus aureus dan *Staphylococcus epidermidis* merupakan bakteri penyebab infeksi kulit, termasuk jerawat. Daun balakacida (*Chromolaena odorata L.*) diketahui mengandung senyawa aktif seperti flavonoid, alkaloid, saponin, dan tanin. yang memiliki aktivitas antibakteri. Penelitian ini bertujuan untuk mengetahui dan mengevaluasi sediaan gel ekstrak etanol daun balakacida sebagai antibakteri terhadap *Staphylococcus aureus* dan *Staphylococcus epidermidis*, dengan variasi konsentrasi 10% (FI), 15% (FII), dan 20% (FIII) menggunakan basis gel karbopol. Evaluasi dilakukan terhadap mutu fisik sediaan (organoleptik, homogenitas, pH, daya lekat, daya sebar, viskositas, dan stabilitas) serta uji aktivitas antibakteri menggunakan metode sumuran. Hasil menunjukkan bahwa seluruh formulasi memiliki aktivitas antibakteri terhadap *Staphylococcus aureus* dengan zona hambat sebesar 13,745 mm (FI), 14,056 mm (FII), dan 15,125 mm (FIII), serta terhadap *Staphylococcus epidermidis* masing-masing sebesar 12,481 mm, 12,555 mm, dan 12,981 mm. Dengan demikian gel ekstrak etanol daun balakacida efektif menghambat pertumbuhan kedua antibakteri.

Kata kunci: Antiakteri, daun balakacida (*Chromolaena odorata L.*), gel, *Staphylococcus aureus*, dan *Staphylococcus epidermidis*.

Antibacterial Activity Test of Ethanol Extract Gel of Balakacida Leaves (*Chromolaena odorata* L.) Against *Staphylococcus aureus* and *Staphylococcus epidermidis*

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Abstract

Staphylococcus aureus and *Staphylococcus epidermidis* are bacteria that cause skin infections, including acne. Balakacida leaves (*Chromolaena odorata* L.) are known to contain active compounds such as flavonoids, alkaloids, saponins, and tannins, which possess antibacterial activity. This study aimed to determine and evaluate the ethanol extract gel formulation of balakacida leaves as an antibacterial agent against *Staphylococcus aureus* and *Staphylococcus epidermidis*. The gel was formulated using carbopol as the base with extract concentrations of 10% (FI), 15% (FII), and 20% (FIII). Evaluation included physical quality tests (organoleptic properties, homogeneity, pH, adhesion, spreadability, viscosity, and stability) and antibacterial activity using the well diffusion method. The results showed that all formulations exhibited antibacterial activity against *Staphylococcus aureus* with inhibition zones of 13.745 mm (FI), 14.056 mm (FII), and 15.125 mm (FIII), and against *Staphylococcus epidermidis* with inhibition zones of 12.481 mm, 12.555 mm, and 12.981 mm, respectively. Therefore, the ethanol extract gel of balakacida leaves is effective in inhibiting the growth of both bacteria.

Keywords: Antibacterial, balakacida leaves (*Chromolaena odorata* L.), gel, *Staphylococcus aureus*, *Staphylococcus epidermidis*.