

INTISARI

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Tangan menjadi perantara masuknya mikroba dalam tubuh, sehingga membutuhkan pembersih tangan tanpa air atau *handsanitizer*. Penelitian ini bertujuan untuk mengetahui apakah sediaan gel *handsanitizer* ekstrak etanol daun kenikir (*Cosmos caudatus* K.) dapat menghambat pertumbuhan bakteri *Staphylococcus aureus*. Metode ekstraksi dengan metode maserasi menggunakan etanol 70%. Formulasi menggunakan kontrol negatif berupa basis gel tanpa zat aktif (carbopol 940, trietanolamin, gliserin, propilenglikol, metil paraben dan *aquadest*), kontrol positif berupa gentamisin *disc*, formula gel *handsanitizer* ekstrak etanol daun kenikir meliputi organoleptis, pH, viskositas, homogenitas, daya lekat dan daya sebar. Uji aktivitas antibakteri dilakukan dengan metode *Kirby-Bauer* dengan melihat diameter zona hambat. Analisis data aktivitas antibakteri menggunakan analisis *one way* Anova. Aktivitas antibakteri ditandai dengan adanya zona bening disekitar kertas cakram yang disebut daya hambat. Hasil analisis menunjukkan diameter zona hambat kontrol positif (15,2±0,6 mm) (kuat), kontrol negatif (0±0 mm) (lemah), konsentrasi 2% (4,1±1,9 mm) (lemah), konsentrasi 5% (5,3±2,4 mm) (sedang), konsentrasi 10% (6,9±1,3 mm) (sedang). Kesimpulan penelitian ini yaitu sediaan gel *handsanitizer* Ekstrak Etanol 70% Daun Kenikir mampu menghambat pertumbuhan bakteri *Staphylococcus aureus*.

Kata kunci : Antibakteri; Gel *handsanitizer*; Daun kenikir; *Staphylococcus aureus*

ABSTRACT

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Hands are an intermediary for the entry of microbes into the body, so hand sanitiser is needed. The study aims to determine whether the hand sanitiser gel preparation of Cosmos caudatus K ethanol extract can inhibit the growth of Staphylococcus aureus bacteria. The extraction method used the maceration method with 70% ethanol. The formulation used a negative control in a gel base without active substances (carbopol 940, triethanolamine, glycerin, propylene glycol, methylparaben and aquadest) while a positive control in the form of gentamicin disc. The hand sanitiser gel formula of Cosmos caudatus K ethanol extract includes organoleptic, pH, viscosity, homogeneity, adhesion and spreadability. The antibacterial activity test was carried out using the Kirby-Bauer method and looking at the diameter of the inhibition zone. Analysis of antibacterial activity data used one-way Annova analysis. Antibacterial activity is indicated by a clear zone around the paper disc called the inhibitory power. The results of the analysis show that the diameter of the inhibition zone was positive control (15.2±0.6 mm) (strong), negative control (0±0 mm) (weak), 2% concentration (4.1±1.9 mm) (weak), 5% concentration (5.3±2.4 mm) (medium), 10% concentration (6.9±13 mm) (medium). This study concludes that the preparation of hand sanitiser gel 70% Ethanol Extract from Cosmos caudatus K is able to inhibit the growth of Staphylococcus aureus bacteria.

Keywords: *Antibacterial; Hand Sanitiser Gel; Cosmos caudatus K; Staphylococcus Aureus*

