

## INTI SARI

**Sari, Fita. 2021. Uji Aktivitas Antibakteri Ekstrak Etanolik Daun Kenikir (*Cosmos caudatus* H.B.K) terhadap *Pseudomonas aeruginosa* ATCC 27853. Program Studi D-IV Analisis Kesehatan, Fakultas Ilmu Kesehatan, Universitas Setia Budi.**

Tanaman kenikir (*Cosmos caudatus* H.B.K) merupakan tanaman obat herbal yang mengandung senyawa saponin, flavonoid, alkaloid, terpenoid, tanin. Tujuan dari penelitian ini adalah untuk mengetahui aktivitas antibakteri ekstrak etanolik daun kenikir terhadap bakteri *Pseudomonas aeruginosa* ATCC 27853.

Ekstrak daun kenikir diperoleh melalui metode maserasi dengan pelarut etanol 96% (1:10). Pengenceran ekstrak daun kenikir dibuat dalam berbagai konsentrasi 12,5%, 25%, 50% dan 75% menggunakan pelarut DMSO 2% (metode difusi). Hasil uji difusi kemudian dianalisis menggunakan uji One Way Anova.

Hasil dari penelitian ini menunjukkan ekstrak daun kenikir mempunyai aktivitas antibakteri terhadap *Pseudomonas aeruginosa*. Ekstrak etanolik daun kenikir konsentrasi 12,5%, 25%, 50% dan 75% mempunyai aktivitas antibakteri terhadap *Pseudomonas aeruginosa* ATCC 27853 dengan rerata zona hambat secara berturut-turut adalah 8,6, 12, 16,33, dan 21,33. Diameter zona hambat yang dihasilkan memiliki perbedaan yang signifikan.

Kata kunci : Ekstrak, antibakteri, *Pseudomonas aeruginosa*, *Cosmos caudatus* H.B.K.

## ABSTRACT

**Sari, Fita. 2021. Antibacterial Activity Test of Ethanolic Extract of Kenikir Leaves (*Cosmos caudatus* H.B.K) against *Pseudomonas aeruginosa* ATCC 27853. Bachelor's degree Program in Medical Laboratory Technology, Health Sciences Faculty, Setia Budi University.**

Kenikir (*Cosmos caudatus* H.B.K) is an herbal medicinal plant that contains saponins, flavonoids, alkaloids, terpenoids, and tannins. The purpose of this study was to determine the antibacterial activity of the ethanolic extract of kenikir leaves against the bacterium *Pseudomonas aeruginosa* ATCC 27853.

Kenikir leaf extract was obtained by maceration method with 96% ethanol (1:10) solvent. The dilution of kenikir leaf extract was made in various concentrations of 12.5%, 25%, 50% and 75% using 2% DMSO (diffusion method). The results of the diffusion test were then analyzed using the One Way Anova test.

The results of this study showed that kenikir leaf extract had antibacterial activity against *Pseudomonas aeruginosa*. The ethanolic extract of kenikir leaves with concentrations of 12.5%, 25%, 50% and 75% had antibacterial activity against *Pseudomonas aeruginosa* ATCC 27853 with the mean zones of inhibition respectively 8.6, 12, 16.33, and 21.33. The diameter of the resulting inhibition zone has a significant difference

Keywords : Extract, antibacterial, *Pseudomonas aeruginosa*, *Cosmos caudatus* H.B.K