

ABSTRAK

UJI DAYA HAMBAT EKSTRAK ETANOL 96% DAUN LANGSAT (*Lansium domesticum*) TERHADAP BAKTERI *Escherichia coli* MENGGUNAKAN METODE DIFUSI SUMURAN (Oleh : Tiara Anargiya; Pembimbing : Gusti Rizaldi dan Fitriyanti); 2024; 82 halaman

Langsat (*Lansium domesticum*) merupakan salah satu tanaman asli Indonesia yang telah lama digunakan dalam pengobatan tradisional. Pemanfaatan tanaman ini sebagai tanaman obat sangat membantu masyarakat Indonesia dalam mengatasi berbagai penyakit seperti obat penurun demam, diare, obat cacing. Selain khasiatnya yang telah turun temurun digunakan oleh masyarakat, tanaman ini lebih murah dan mudah didapat. Tujuan penelitian ini adalah untuk mengetahui nilai daya hambat dan kadar hambat minimum (KHM) ekstrak etanol 96% daun langsung yang diekstraksi menggunakan metode sokletasi terhadap pertumbuhan *Escherichia coli*. Metode penelitian ini adalah eksperimental. Pengujian daya hambat menggunakan metode Difusi Sumuran. Hasil penelitian menunjukkan bahwa Ekstrak Etanol 96% Daun Langsung positif mengandung senyawa Flavonoid, Fenol, Saponin Dan Tanin. Ekstrak Etanol 96% Daun Langsung pada konsentrasi 25%, 50%, 75% dan 100% didapatkan hasil daya hambat pada konsentrasi 75% dengan rata-rata sebesar 0,66 mm dan konsentrasi 100% dengan rata-rata sebesar 1,65 mm terhadap bakteri *Escherichia coli* sehingga dikategorikan resisten. DMSO 10% sebagai kontrol negatif tidak menghasilkan daya hambat, sedangkan *ampicillin* sebagai kontrol positif menghasilkan daya hambat dengan rata-rata sebesar 32,16 mm. Hasil tersebut dapat disimpulkan bahwa ekstrak etanol 96% daun langsung (*Lansium domesticum*) tidak efektif menghambat pertumbuhan bakteri *Escherichia coli*.

Kata kunci : Daya Hambat, Daun Langsung, *Escherichia coli*, Metode Sumuran

ABSTRACT

TESTING THE INHIBITION OF 96% ETHANOL EXTRACT OF LANGSAT LEAVES (*Lansium domesticum*) AGAINST *Escherichia coli* BACTERIA USING WELL DIFFUSION METHOD (By: Tiara Anargiya; Supervisors: Gusti Rizaldi and Fitriyanti); 2024; 82 page

*Langsat (*Lansium domesticum*) is one of the native Indonesian plants that has long been used in traditional medicine. The use of this plant as a medicinal plant is very helpful for the Indonesian people in overcoming various diseases such as fever-reducing drugs, diarrhea, worm medicines. In addition to its properties that have been hereditary used by the community, this plant is cheaper and easier to obtain. The purpose of this study was to determine the inhibitory value and minimum inhibitory level (KHM) of 96% ethanol extract of langsat leaves extracted using the sokletation method against *Escherichia coli* growth. This research method is experimental. Inhibition testing using the Well Diffusion method. The results showed that 96% ethanol extract of langsat leaves positively contained compounds of flavonoids, phenols, saponins and tannins. 96% Ethanol Extract of Langsat Leaf at concentrations of 25%, 50%, 75% and 100% obtained inhibition results at a concentration of 75% with an average of 0.66 mm and 100% concentration with an average of 1.65 mm against *Escherichia coli* bacteria so that it is categorized as resistant. DMSO 10% as a negative control did not produce inhibition, while ampicillin as a positive control produced inhibition with an average of 32.16 mm. These results can be concluded that 96% ethanol extract of langsat (*Lansium domesticum*) leaves is not effective in inhibiting the growth of *Escherichia coli* bacteria.*

Keywords: *Inhibitory Power, Langsat Leaf, *Escherichia coli*, Wells Method*