

**FAKULTAS KEDOKTERAN DAN ILMU KESEHATAN  
UNIVERSITAS MUHAMMADIYAH MAKASSAR**

**Skripsi, 13 Februari 2026**

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**Pengaruh konsentrasi ekstrak daun pepaya (*carica papaya l.*)  
Terhadap zona hambat pertumbuhan *escherichia coli* secara in  
vitro**

**ABSTRAK**

**Latar Belakang :** Penyakit infeksi yang disebabkan oleh bakteri seperti *Escherichia coli* masih menjadi masalah kesehatan masyarakat, terutama di negara berkembang. *Escherichia coli* merupakan bakteri gram negatif yang dapat menyebabkan diare, infeksi saluran kemih, hingga infeksi sistemik. Penggunaan antibiotik yang tidak rasional telah menyebabkan peningkatan resistensi bakteri, sehingga diperlukan alternatif terapi yang lebih aman dan efektif, salah satu contohnya adalah daun pepaya (*Carica papaya l.*). **Tujuan:** Mengetahui pengaruh ekstrak daun pepaya (*Carica papaya l.*) terhadap pertumbuhan bakteri *Escherichia coli* secara in vitro melalui pengamatan zona hambat. **Metode Penelitian :** Penelitian true experimental menggunakan metode difusi cakram. Konsentrasi ekstrak 25%, 50%, 75% dan 100%. Kontrol positif kloramfenikol dan kontrol negative DMSO 10%. **Hasil Penelitian :** Zona hambat yang terbentuk ekstrak daun pepaya konsentrasi 25% dengan diameter 14,35 mm, konsentrasi 50% diameter 16,15 mm, konsentrasi 75% diameter 17,32 mm, dan konsentrasi 100% diameter 19,1 mm. Kontrol positif menggunakan kloramfenikol diameter 39,22 mm dan kontrol negatif tidak terdapat zona hambat. **Kesimpulan:** Ekstrak daun pepaya (*Carica Papaya L.*) memiliki efektifitas antibakteri terhadap *Escherichia coli*.

**Kata Kunci :** Daun pepaya (*Carica papaya l.*), antibakteri, *Escherichia coli*.

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**The effect of papaya leaf extract concentration (*carica papaya l.*) On the growth inhibition zone of *escherichia coli* in vitro**

**ABSTRACT**

**Background:** Infectious diseases caused by bacteria such as *Escherichia coli* remain a public health problem, especially in developing countries. *Escherichia coli* is a gram-negative bacterium that can cause diarrhea, urinary tract infections, and even systemic infections. The irrational use of antibiotics has led to increased bacterial resistance, making it necessary to find safer and more effective alternative therapies, one of which is papaya leaf (*Carica papaya l.*). **Objective:** To determine the effect of papaya leaf extract (*Carica papaya l.*) on the growth of *Escherichia coli* bacteria in vitro by observing the inhibition zone. **Research Method:** This true experimental study used the disc diffusion method. Extract concentrations were 25%, 50%, 75%, and 100%. Positive control was chloramphenicol, and negative control was 10% DMSO. **Research Results:** The inhibition zones formed by papaya leaf extract were 14.35 mm at 25% concentration, 16.15 mm at 50% concentration, 17.32 mm at 75% concentration, and 19.1 mm at 100% concentration. The positive control using chloramphenicol had a diameter of 39.22 mm, and the negative control showed no inhibition zone. **Conclusion:** Papaya leaf extract (*Carica Papaya l.*) has antibacterial effectiveness against *Escherichia coli*.

**Keywords:** Pepaya leaves (*Carica papaya l.*), antibacterial, *Escherichia coli*.