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**Uji Efektivitas Berbagai Konsentrasi Daun Sirih Cina (*Peperomia Pellucida*)
Terhadap Pertumbuhan *Salmonella Typhi* Secara In Vitro**

ABSTRAK

Latar belakang: Demam tifoid yang disebabkan oleh *Salmonella typhi* masih menjadi masalah kesehatan, terutama dengan meningkatnya resistensi antibiotik. Daun Sirih Cina (*Peperomia pellucida*) diketahui mengandung senyawa bioaktif seperti flavonoid, alkaloid, tanin, dan saponin yang berpotensi sebagai antibakteri. **Tujuan:** Mengetahui efektivitas ekstrak etanol daun Sirih Cina terhadap pertumbuhan *Salmonella typhi* secara *in vitro* serta menentukan konsentrasi yang paling optimal. **Metode:** Penelitian true experimental dengan metode difusi sumuran menggunakan konsentrasi ekstrak 25%, 50%, dan 75%. Kloramfenikol digunakan sebagai kontrol positif dan DMSO 10% sebagai kontrol negatif. Parameter yang diukur adalah diameter zona hambat. **Hasil:** Rata-rata zona hambat pada konsentrasi 25% sebesar 13,04 mm, konsentrasi 50% sebesar 14,76 mm, dan konsentrasi 75% sebesar 22,61 mm. Kontrol positif menunjukkan zona hambat 22,20 mm, sedangkan kontrol negatif tidak menunjukkan zona hambat (0 mm). Semakin tinggi konsentrasi ekstrak, semakin besar daya hambat yang dihasilkan. **Kesimpulan:** Ekstrak etanol daun Sirih Cina (*Peperomia pellucida*) memiliki aktivitas antibakteri terhadap *Salmonella typhi*, dengan konsentrasi 75% sebagai konsentrasi paling optimal dalam penelitian ini.

Kata kunci: *Peperomia pellucida*, *Salmonella typhi*, antibakteri, zona hambat.

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Effectiveness Test of Various Concentrations of Suruhan Leaf (*Peperomia pellucida*) Extract on the Growth of *Salmonella typhi* In Vitro

ABSTRACT

Background: Typhoid fever caused by *Salmonella typhi* remains a public health problem, particularly with the increasing occurrence of antibiotic resistance. Suruhan leaf (*Peperomia pellucida*) contains bioactive compounds such as flavonoids, alkaloids, tannins, and saponins which are potentially active as antibacterial agents.

Objective: To determine the effectiveness of the ethanolic extract of Suruhan leaf on the growth of *Salmonella typhi* in vitro and to identify the most optimal concentration.

Methods: This was a true experimental study using the well diffusion method with extract concentrations of 25%, 50%, and 75%. Chloramphenicol was used as the positive control and 10% DMSO as the negative control. The measured parameter was the diameter of the inhibition zone.

Results: The mean inhibition zone at 25% concentration was 13.04 mm, at 50% concentration was 14.76 mm, and at 75% concentration was 22.61 mm. The positive control showed an inhibition zone of 22.20 mm, while the negative control showed no inhibition zone (0 mm). Higher extract concentrations produced greater antibacterial inhibitory activity.

Conclusion: The ethanolic extract of Suruhan leaf (*Peperomia pellucida*) exhibits antibacterial activity against *Salmonella typhi*, with the 75% concentration being the most optimal in this study.

Keywords: *Peperomia pellucida*, *Salmonella typhi*, antibacterial, inhibition zone.