

ABSTRAK

Nama : Fadhilatul Hilya
Program Studi : Kedokteran Umum
Judul : Efektivitas Ekstrak Daun Sirih Cina (*Peperomia pellucida*) terhadap Pertumbuhan bakteri *Klebsiella pneumoniae* dan Tinjauannya menurut pandangan Islam

Latar Belakang : Tumbuhan daun sirih cina (*Peperomia pellucida*) sering dimanfaatkan sebagai obat tradisional negara-negara Asia, dengan meminum air rebusan daun sirih cina. Tanaman ini memiliki antioksidan dan anti mikroba spektrum luas yang masih belum banyak diteliti. Allah telah menciptakan tumbuhan dan hewan dengan berbagai macam kegunaan dan manfaat bagi manusia dan makhluk hidup lainnya.

Tujuan Penelitian : Penelitian ini bertujuan untuk mengetahui efektivitas ekstrak daun sirih cina (*Peperomia pellucida*) terhadap hambatan pertumbuhan bakteri *Klebsiella pneumoniae*.

Metode : Penelitian yang dilakukan adalah penelitian eksperimental laboratorik dengan metode *disk diffusion*. Ekstrak daun sirih cina dibuat dengan cara mengeringkan daun pada suhu ruang, kemudian daun dihaluskan, dan diekstrak menggunakan pelarut etanol 96% dan dievaporasi hingga menghasilkan ekstrak kental yang bebas pelaut. Bakteri ditanam pada *Mueller Hinton Agar* kemudian diletakkan cakram kosong di atasnya lalu diteteskan ekstrak daun sirih cina (*Peperomia pellucida*) dengan konsentrasi 25%, 50%, 75% dan 100%. Sediaan didiamkan selama 24 jam kemudian zona hambat yang terbentuk diamati dan diameternya diukur dalam mm menggunakan jangka sorong.

Hasil : Hasil penelitian menunjukkan diameter zona hambat pada ekstrak konsentrasi 25%, 50%, 75% dan 100% yaitu sebesar 9,63mm, 9,63mm, 10,88mm, dan 11,15mm. untuk kontrol positif menghasilkan zona hambat 25,82 serta tidak ditemukan zona hambat pada kontrol negatif. menunjukkan bahwa ekstrak daun sirih cina (*Peperomia pellucida*) kurang efektif terhadap pertumbuhan bakteri *Klebsiella pneumoniae*.

Simpulan : Ekstrak daun sirih cina kurang efektif dalam menghambat pertumbuhan bakteri *Klebsiella pneumoniae*.

Kata Kunci: Daun Sirih Cina, *Peperomia pellucida*, *Klebsiella pneumoniae*

ABSTRACT

Name : Fadhilatul Hilya
Study Program : Medicine
Title : Effectiveness Of Daun Sirih Cina (*Peperomia Pellucida*) Extract On The Growth Of *Klebsiella Pneumoniae* And Its Review According To Islamic Perspective

Background: *Daun sirih cina* (*Peperomia pellucida*) is often used as a traditional medicine of Asian countries, by drinking boiled water of Chinese betel leaf. This plant has a broad spectrum of antioxidants and anti-microbial which has not been much studied. Allah has created plants and animals with various uses and benefits for humans and other living things.

Objectives: This study aims to determine the effectiveness of *Daun sirih cina* (*Peperomia pellucida*) extract on the growth of *Klebsiella pneumoniae* bacteria.

Method : The research conducted was a laboratory experimental study using the disk diffusion method. *Daun sirih cina* extract is made by drying the leaves at room temperature, then the leaves are blended, and extracted using 96% ethanol solvent and evaporated to produce thick extracts that are free of solvent. Bacteria were planted on Mueller Hinton Agar then placed an empty disc on top of it and then dripped with *daun sirih cina* extract (*Peperomia pellucida*) with concentrations of 25%, 50%, 75% and 100%. The preparations were left to stand for 24 hours then the inhibition zones formed were observed and their diameters measured in mm using the calipers.

Result: The results showed inhibition zone diameters in extract concentrations of 25%, 50%, 75% and 100%, namely 9.63mm, 9.63mm, 10.88mm, and 11.15mm. for positive control it produces inhibition zone 25.82 and no inhibition zone found in negative control. showed that *daun sirih cina* extract (*Peperomia pellucida*) was less effective against the growth of *Klebsiella pneumoniae*.

Conclusion: *Daun sirih cina* extract is less effective in inhibiting the growth of *Klebsiella pneumoniae*.

Keywords: *Daun Sirih Cina, Peperomia pellucida, Klebsiella pneumoniae*