

**UJI AKTIVITAS ANTIBAKTERI EKSTRAK ETANOL 70% DAUN
KARAMUNTING (*Rhodomyrtus tomentosa* (Ait.) Hassk)
TERHADAP PERTUMBUHAN BAKTERI *Vibrio cholerae*
SECARA IN VITRO**

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Intisari

Latar Belakang: *Vibrio cholerae* merupakan bakteri penyebab terjadinya diare. Beberapa penelitian menunjukkan terjadinya *multidrug resistant* terhadap *Vibrio cholerae*. Peningkatan resistensi bakteri *Vibrio cholerae* terhadap antibiotik memerlukan alternatif pengobatan yang berasal dari tanaman. Daun Karamunting (*Rhodomyrtus tomentosa* (Ait.) Hassk) merupakan salah satu tanaman di Indonesia yang memiliki kandungan metabolit sekunder yang dapat berfungsi sebagai senyawa antibakteri. **Tujuan:** Penelitian ini bertujuan untuk mengetahui aktivitas antibakteri ekstrak etanol 70% daun karamunting (*Rhodomyrtus tomentosa* (Ait.) Hassk) dalam menghambat pertumbuhan *Vibrio cholerae*. **Metodologi:** Skrining fitokimia menggunakan metode uji tabung. Uji aktivitas antibakteri menggunakan metode difusi cakram Kirby-Bauer dengan konsentrasi 6,25%, 12,5%, 25%, 50%, dan 100%. Daun *Rhodomyrtus tomentosa* (Ait.) Hassk diekstraksi dengan metode maserasi menggunakan pelarut etanol 70%. Kontrol positif yang digunakan adalah Ciprofloxacin 5 µg/disk sedangkan kontrol negatif yang digunakan adalah DMSO 10%. **Hasil:** Metabolit sekunder yang terkandung dalam ekstrak etanol 70% daun *Rhodomyrtus tomentosa* (Ait.) Hassk yaitu fenol, flavonoid, saponin, tanin, steroid dan triterpenoid. Ekstrak etanol 70% daun *Rhodomyrtus tomentosa* (Ait.) Hassk memiliki aktivitas antibakteri terhadap *Vibrio cholerae* pada konsentrasi 6,25%; 12,5%; 25%; 50%; 100% dengan masing-masing diameter zona hambat 6,97; 7,57; 8,98; 11,07 dan 13,61 mm. **Kesimpulan:** Ekstrak etanol 70% daun karamunting (*Rhodomyrtus tomentosa* (Ait.) Hassk) memiliki aktivitas antibakteri terhadap pertumbuhan *Vibrio cholerae*.

Kata Kunci: Antibakteri, Ekstrak etanol daun *Rhodomyrtus tomentosa* (Ait.) Hassk, *Vibrio cholerae*

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**THE TEST ON ANTIBACTERIAL ACTIVITY OF 70% ETHANOL
EXTRACT OF KARAMUNTING LEAVES (*Rhodomyrtus tomentosa* (Ait.)
Hassk) AGAINST *Vibrio cholerae* GROWTH IN VITRO**

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Abstract

Background: *Vibrio cholerae* is one of the bacteria that caused diarrhea. Some studies show the occurrence of multidrug resistant against *Vibrio cholerae*. The increasing of bacterial resistance against antibiotics, including *Vibrio cholerae*, requires alternative treatments that come from plants. Karamunting (*Rhodomyrtus tomentosa* (Ait.) Hassk) is one of the plants in Indonesia that has secondary metabolites which have antibacterial activity. **Objective:** This study aimed to determine the antibacterial activity of ethanol extract of *Rhodomyrtus tomentosa* (Ait.) Hassk leaves in inhibiting the growth of *Vibrio cholerae*. **Methods:** Phytochemical screening of ethanol extract of *Rhodomyrtus tomentosa* (Ait.) Hassk leaves was performed using test tube method. *Rhodomyrtus tomentosa* (Ait.) Hassk leaves were extracted with maseration method using 70% ethanol. The testing of antibacterial activity was determined using Kirby-Bauer disc diffusion method with the concentration of 6,25%, 12,5%, 25%, 50%, and 100%. Ciprofloxacin 5 µg/disk was used as positive control while negative control used DMSO 10%. **Results:** Secondary metabolites contained in the ethanol extract of *Rhodomyrtus tomentosa* (Ait.) Hassk leaves are phenols, flavonoids, saponins, tannins, steroids and triterpenoids. *Rhodomyrtus tomentosa* (Ait.) Hassk has an antibacterial activity against *Vibrio cholerae* at concentrations 6.25%; 12.5%; 25%; 50%; 100% with the diameter of inhibition zone respectively, 6.97; 7.57; 8.98; 11.07 and 13.61 mm. **Conclusion:** Ethanol extract of Karamunting (*Rhodomyrtus tomentosa* (Ait.) Hassk) leaves have antibacterial activity against *Vibrio cholerae*.

Keywords: Antibacterial, Ethanol extract of *Rhodomyrtus tomentosa* (Aiton) Hassk leaves, *Vibrio cholerae*

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