

**UJI AKTIVITAS ANTIBAKTERI EKSTRAK DAUN NIPAH
(*Nypa fruticans*) TERHADAP BAKTERI *Staphylococcus
epidermidis* dan *Pseudomonas aeruginosa***

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ABSTRAK

Gangguan kulit merupakan salah satu masalah kesehatan yang sering terjadi dan dapat disebabkan oleh infeksi bakteri patogen. Bakteri *Staphylococcus epidermidis* dan *Pseudomonas aeruginosa* diketahui berperan dalam berbagai infeksi yang dapat menyerang permukaan kulit. Upaya pemanfaatan bahan alam sebagai alternatif antibakteri menjadi penting, salah satunya ialah daun nipah (*Nypa fruticans*), yang mengandung berbagai metabolit sekunder dengan potensi aktivitas antibakteri. Penelitian ini bertujuan mengetahui aktivitas antibakteri ekstrak etanol daun nipah terhadap kedua bakteri uji serta menentukan konsentrasi yang paling efektif. Ekstraksi dilakukan menggunakan metode maserasi dengan pelarut etanol 96% dan menghasilkan rendemen sebesar 15,0%. Pengujian antibakteri menggunakan metode difusi cakram pada konsentrasi 400 µg/disk, 500 µg/disk, dan 600 µg/disk, dengan kloramfenikol sebagai kontrol positif dan DMSO sebagai kontrol negatif. Hasil penelitian menunjukkan bahwa ekstrak daun nipah mampu membentuk zona hambat pada semua konsentrasi uji. Zona hambat terbesar ditemukan pada konsentrasi 600 µg/disk yaitu 14,7 mm terhadap *Staphylococcus epidermidis* dan 14,4 mm terhadap *Pseudomonas aeruginosa*, yang termasuk kategori daya hambat kuat. Aktivitas antibakteri ini diduga berasal dari senyawa flavonoid, tanin, alkaloid, dan terpenoid yang dapat merusak membran sel bakteri.

Kata kunci: *Nypa fruticans*, antibakteri, metode difusi cakram, *Staphylococcus epidermidis*, *Pseudomonas aeruginosa*.

***ANTIBACTERIAL ACTIVITY TEST OF NIPAH LEAF
EXTRACT (*Nypa fruticans*) AGAINST *Staphylococcus
epidermidis* and *Pseudomonas aeruginosa****

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ABSTRACT

*Skin disorders are common health problems that may occur due to infections caused by pathogenic bacteria *Staphylococcus epidermidis* and *Pseudomonas aeruginosa* are known to play a role in various infections that can affect the skin surface. The utilization of natural materials as alternative antibacterial agents is therefore important, one of which is nipa palm leaves (*Nypa fruticans*), which contain various secondary metabolites with potential antibacterial activity. This study aims to determine the antibacterial activity of the ethanol extract of nipa palm leaves against both test bacteria and to identify the most effective concentration. The extraction was carried out using the maceration method with 96% ethanol, resulting in a yield of 15.0%. Antibacterial testing was conducted using the disc diffusion method at concentrations of 400 µg/disk, 500 µg/disk, and 600 µg/disk, with chloramphenicol as the positive control and DMSO as the negative control. The results showed that the nipa leaf extract produced inhibition zones at all test concentrations. The largest inhibition zones were observed at a concentration of 600 µg/disk, measuring 14.7 mm against *Staphylococcus epidermidis* and 14.4 mm against *Pseudomonas aeruginosa*, both classified as strong inhibition. This antibacterial activity is presumed to be attributed to flavonoids, tannins, alkaloids, and terpenoids that can disrupt bacterial cell membranes. Thus, nipa palm leaves have the potential to be used as a natural antibacterial source against bacteria that cause skin disorders.*

Keywords: *Nypa fruticans, antibacterial, disc diffusion method, *Staphylococcus epidermidis*, *Pseudomonas aeruginosa*.*