UJI AKTIVITAS ANTIBAKTERI EKSTRAK ETANOL DAUN PANDAN WANGI (*Pandanus amaryllifolius* Roxb) TERHADAP PERTUMBUHAN BAKTERI *Staphylococcus epidermidis* ATCC 12228 DENGAN METODE CAKRAM

Ade Erni[1], Dianita Febrina Leswara[2], Nur'aini Purnamaningsih[3]

INTISARI

Latar Belakang: Jerawat merupakan keadaan tersumbatnya pori-pori kulit, hingga menyebabkan munculnya bintik-bintik di area wajah hingga menjadi abses. Salah satu mikroorganisme yang berperan dalam perkembangan jerawat adalah bakteri *Staphylococcus epidermidis*. Pengobatan jerawat pada umumnya menggunakan antibiotik klindamisin. Penggunaan antibiotik yang tidak sesuai dapat menyebabkan bakteri resistensi terhadap antibiotik. Oleh karena itu, dibutuhkan alternatif lain untuk pengobatan jerawat menggunakan bahan alam. Salah satu bahan alam yang diketahui mempunyai aktivitas antibakteri yaitu tanaman pandan wangi.

Tujuan Penelitian: Mengetahui aktivitas antibakteri ekstrak etanol daun pandan wangi terhadap pertumbuhan bakteri *Staphylococcus epidermidis* ATCC 12228 dan kandungan metabolit sekunder ekstrak etanol daun pandan wangi.

Metode Penelitian: Daun pandan wangi dilakukan proses maserasi menggunakan pelarut etanol 70%, selanjutnya skrining fitokimia yaitu uji alkaloid, flavonoid, saponin, tanin, steroid, dan terpenoid, serta dilakukan uji aktivitas antibakteri menggunakan metode difusi cakram pada variasi konsentrasi ekstrak 25%, 50%, 75%, dan 100%, klindamisin 0,03% digunakan sebagai kontrol positif.

Hasil Penelitian: Hasil skirining fitokimia ekstrak daun pandan wangi mengandung senyawa flavonoid, saponin, tanin dan steroid. Hasil dari uji aktivitas antibakteri menunjukkan ekstrak etanol daun pandan wangi dapat menghambat pertumbuhan bakteri *Staphylococcus epidermidis* ATCC 12228 pada konsentrasi 25%, 50%, 75%, dan 100% dengan zona hambat berturut-turut sebesar 10,50 mm, 10,54 mm, 10,59 mm, dan 10,49 mm.

Kesimpulan: Ekstrak etanol daun pandan wangi mengandung senyawa flavonoid, saponin, tanin, dan steroid yang memiliki aktivitas antibakteri terhadap bakteri *Staphylococcus epidermidis* ATCC 12228 pada konsentrasi 25%, 50%, 75%, dan 100% dengan kategori daya hambat sedang.

Kata Kunci: Antibakteri, Daun pandan wangi, *Staphylococcus epidermidis*

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[1]Mahasiswa Farmasi Universitas Jenderal Achmad Yani Yogyakarta
[2]Dosen Farmasi Universitas Jenderal Achmad Yani Yogyakarta
[3]Dosen TBD Universitas Jenderal Achmad Yani Yogyakarta

ANTIBACTERIAL ACTIVITY TEST OF ETHANOL EXTRACT OF PANDAN LEAVES (*Pandanus amaryllifolius* Roxb) ON THE GROWTH OF *Staphylococcus epidermidis* ATCC 12228 USING THE DISC METHOD

Ade Erni[1], Dianita Febrina Leswara[2,] Nur'aini Purnamaningsih[3]

ABSTRACT

Background: Acne is a condition where the pores of the skin are blocked, causing spots to appear on the face area until they become abscesses. One of the microorganisms that plays a role in the development of acne is the *Staphylococcus epidermidis*. Acne treatment is usually use antibiotic clindamycin. Inappropriate use of antibiotics can cause bacteria to become resistant to antibiotics. Therefore, other alternatives are needed for acne treatment using natural ingredients. One of the natural ingredients known to have antibacterial activity is the pandan wangi plant.
Objective: To deseribe the antibacterial activity of the Ethanol extract of pandanus leaves against the growth of *Staphylococcus epidermidis* ATCC 12228 and secondary metabolites of pandanus leaves.
Methods: Pandanus leaves were macerated using 70% ethanol solvent, followed by phytochemical screening, namely alkaloid, flavonoid, saponin, tannin, steroid, and terpenoid tests, and antibacterial activity tests were carried out using the disc diffusion method at variations in extract concentrations of 25%, 50%, 75%, and 100%, 0.03% clindamycin was used as a positive control.
Pandanus leaves is carried out a maceration process using 70% ethanol solvent,
Results: Phytochemical skrining of pandanus extract contain flavonoid, saponin, tannin and steroid compounds. The results of the antibacterial activity test showed that ethanol extract of pandan wangi leaves can inhibit the growth of *Staphylococcus epidermidis* ATCC 12228 bacteria at concentrations of 25%, 50%, 75%, and 100% with inhibition zones of 10.50 mm, 10.54 mm, 10.59 mm, and 10.49 mm, respectively.
Conclusion: Ethanol extract of pandanus leaf contains flavonoid, saponins, tannins, and steroids compounds has antibacterial activity against *Staphylococcus epidermidis* ATCC 12228 bacteria at 25%, 50%, 75%, and 100% with medium categories.

Keywords: Antibacterial, *Pandanus* leaves, *Staphylococcus epidermidis*

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[1]Student of Pharmacy Universitas Jenderal Achmad Yani Yogyakarta
[2]Lecturer of Universitas Jenderal Achmad Yani Yogyakarta
[3]Lecturer of Blood Bank Technology Universitas Jenderal Achmad Yani Yogyakarta