

ABSTRAK

Latar Belakang: keanekaragaman flora dan fauna di Nusantara Indonesia menjadikan nya memiliki banyak biodiversitas yang bisa dimanfaatkan sebagai obat ataupun sebagai pencegahan dari bakteri ataupun virus. Salah satu tanaman yang tumbuh di bumi pertiwi Indonesia adalah tanaman sukun (*Artocarpis altilis*), bagian buah sering dimanfaatkan sebagai bahan pangan, sedangkan pada bagian kulit buah sukun mempunyai kandungan senyawa metabolit sekunder seperti; flavonoid (hypiroside), alkaloid, fenolik dan triterpene. Senyawa metabolit sekunder tersebut mempunyai aktivitas antibakteri dengan cara kerja secara berturut turut mengganggu permeabilitas membran sel bakteri, menghalangi pembentukan senyawa peptidoglikan pada dinding sel bakteri, dan peningkatan toksisitas terhadap bakteri.

Metode: penelitian ini bersifat eksperimental di laboratorium. Ekstrak kulit buah sukun etil asetat diperoleh secara maserasi dan dipartisi, kemudian dibuat dosis respon yaitu; D1 (5.000 ppm), D2 (10.000 ppm), D3 (20.000 ppm), D4 (40.000 ppm) dan D5 (80.000 ppm) yang pengujian antibakteri dengan metode Kirby-Bauer terhadap bakteri *Staphylococcus epidermidis* serta dilakukan pengujian lanjutan standarisasi ekstrak.

Hasil: penelitian mendapati D5 (80.000 ppm) mempunyai aktivitas daya hambat antibakteri terbesar dan tergolong kuat dibandingkan dosis respon yang lain nya, dengan begitu dosis yang semakin tinggi akan menghasilkan diameter daya hambat yang semakin besar pula dan mempunyai aktivitas antibakteri yang semakin besar

Kesimpulan: ekstrak etil asetat kulit buah sukun mempunyai aktivitas antibakteri terhadap bakteri *Staphylococcus epidermidis* menggunakan metode Kirby-Bauer

Kata kunci: Sukun (*Artocarpis altilis*), *Staphylococcus epidermidis*, Kirby-Bauer, Antibakteri, kloramfenikol

ABSTRACT

Background: the diversity of flora and fauna in the Indonesian archipelago makes it have a lot of biodiversity that can be used as medicine or prevention from bacteria or viruses. One of the plants growing in Indonesian soil is the breadfruit plant, the fruit is often used as a food, while the skin of the breadfruit contains secondary metabolites such as flavonoid, alkaloids, phenolic compounds, and triterpenes. These secondary metabolites have antibacterial activity by disrupting the permeability of bacterial cell membranes, blocking the formation of peptidoglycan compounds in bacterial cell walls, and increasing toxicity to bacteria.

The method: this research is being done experimentally in the laboratory. The ethyl acetate extract of the breadfruit peel was obtained by maceration and partitioning. Then the response dose is given, which is D1 (5.000 ppm), D2 (10.000 ppm), D3 (20.000 ppm), D4 (40.000 ppm), D5 (80.000 ppm) with the antibacterial test according to the Kirby-Bauer method against *Staphylococcus epidermidis* bacteria and continued to test the standardization of the extract.

Results: the research found that D5 (80.000 ppm) exhibited the greatest antibacterial inhibitory activity and was found to be potent compared to other responding doses, this means that the higher the dosage, the greater the inhibitory diameter and the greater the antibacterial effect.

Conclusion: ethyl acetate extract of breadfruit peel has antibacterial activity against *Staphylococcus epidermidis* by using Kirby-Bauer method

Keywords: breadfruit (*Artocarpus altilis*), *Staphylococcus epidermidis*, Kirby-Bauer, antibacterial, chloramphenicol.