

ABSTRAK

Penemuan antimikroba menjadi hal yang sangat penting dalam pengobatan dan kemajuan medis. Tantangan dalam pengobatan menggunakan antibiotik adalah meningkatnya resistensi bakteri terhadap antibiotik yang digunakan. Salah satu bakteri yang mengalami resistensi adalah *Staphylococcus aureus*. Oleh karena itu, diteliti alternatif pengobatan dengan menggunakan tumbuhan yang berpotensi memiliki kemampuan antibakteri. Buah kurma varietas Ajwa telah diteliti memiliki beberapa senyawa aktif yang berpotensi sebagai antibakteri dan antioksidan. Kurma Ajwa juga telah disebutkan di dalam Al-Quran dan Al-Hadits. Tujuan penelitian ini adalah mengetahui efek antibakteri ekstrak aquades buah kurma Ajwa dengan melihat luas zona hambat serta konsentrasi hambat minimum (KHM) dan konsentrasi bunuh minimum (KBM) pada *Staphylococcus aureus*. Penelitian ini menggunakan metode ekperimental secara in vitro dan bersifat deskriptif observasional dengan pendekatan kuantitatif. Metode yang digunakan adalah metode difusi dengan menggunakan sumuran dan metode dilusi padat. Penelitian ini dilakukan di Laboratorium Terpadu Mikrobiologi Poltekkes Bandung. Didapatkan rata-rata hasil zona hambat adalah 5,87 mm yang termasuk kategori sedang, KHM pada konsentrasi 50%, dan KBM belum dapat ditemukan. Berdasarkan uji statistik, hasil penelitian uji difusi menunjukkan bahwa ekstrak aquades buah kurma (*phoenix dactylifera*) varietas Ajwa berpengaruh menghambat pertumbuhan bakteri *Staphylococcus aureus*.

Kata kunci : Ekstrak, *phoenix dactylifera*, *Staphylococcus aureus*, efek antibakteri.

ABSTRACT

The discovery of antimicrobials has been significantly important for current treatments and the future developments in the medical field. One of the challenges faced in the usage of antibiotics is the resistance imposed by the bacteria towards the antibiotics itself. An example of such bacteria that experiences this resistance is Staphylococcus aureus. As a result, studies regarding alternatives of treatments, specifically those utilizing various plants that may potentially have antibacterial properties are conducted. Previous studies have already shown that date palms of the Ajwa variety, known as Phoenix dactylifera, contains several active compounds that are potential antioxidants and exhibit antibacterial properties. The Ajwa date palm has also been mentioned in several scriptures of the Al-Quran and Al-Hadits. The objective of this study is to understand the antibacterial properties of aquadest-extracted Phoenix dactylifera through the measurement of the area of the zone of inhibition, the minimum inhibitory concentration (MIC), and the minimum bactericidal concentration (MBC) of Staphylococcus aureus. This study involves the use of an experimental method, known as in vitro, and is also a descriptive observational study with a quantitative approach. The methodology used consists of the well diffusion method and the solid dilution method. This study was conducted at Laboratorium Terpadu Mikrobiologi Poltekkes Bandung. The results of this study show an average zone of inhibition of 5.87 mm which is categorized as medium, a minimum inhibitory concentration of 50%, and a minimum bactericidal concentration that is yet to be found. Based on statistical tests, the result of the diffusion method shows that the aquadest-extracted Phoenix dactylifera is influential in inhibiting the growth of the Staphylococcus aureus bacteria.

Key words : *extract, phoenix dactylifera, Staphylococcus aureus, antibacterial properties.*