

## Abstrak

Meningkatnya resistensi bakteri akibat penggunaan antibiotik yang tidak tepat mendorong perlunya pengembangan bahan alam sebagai alternatif antibakteri yang lebih aman. Daun mangga arumanis diketahui mengandung metabolit sekunder seperti flavonoid, alkaloid, tanin, saponin, dan triterpenoid yang berpotensi memberikan efek antibakteri. Penelitian ini bertujuan untuk mengetahui aktivitas antibakteri ekstrak etanol daun mangga arumanis (*Mangifera indica* L. var. Arumanis) terhadap bakteri *Staphylococcus aureus*. Metode penelitian yang digunakan adalah eksperimen laboratorium yang meliputi determinasi tanaman, pembuatan simplisia, ekstraksi metode maserasi dengan etanol 96%, skrining fitokimia, serta uji antibakteri menggunakan metode difusi cakram. Uji antibakteri dilakukan dengan konsentrasi ekstrak 5%, 10%, dan 15%, dengan kontrol positif kloramfenikol dan kontrol negatif DMSO. Zona hambat diamati setelah inkubasi 24 jam pada suhu 37°C. Hasil penelitian menunjukkan bahwa ekstrak etanol daun mangga arumanis positif mengandung alkaloid, flavonoid, tanin, saponin, dan triterpenoid. Pada uji antibakteri, ekstrak menghasilkan zona hambat sebesar 3,0 mm pada konsentrasi 5%, 4,38 mm pada konsentrasi 10%, dan 6,13 mm pada konsentrasi 15%. Konsentrasi 5% dan 10% dikategorikan memiliki aktivitas lemah, sedangkan konsentrasi 15% menunjukkan aktivitas sedang. Kontrol positif menghasilkan zona hambat 21,43 mm, sementara kontrol negatif tidak menunjukkan aktivitas. Kesimpulan penelitian ini adalah bahwa ekstrak etanol daun mangga arumanis memiliki aktivitas antibakteri terhadap *Staphylococcus aureus*, dengan efektivitas yang meningkat seiring bertambahnya konsentrasi ekstrak. Namun, daya hambatnya masih lebih rendah dibandingkan antibiotik standar.

**Kata Kunci:** Daun mangga arumanis, antibakteri, *Staphylococcus aureus*, fitokimia, difusi cakram

## **Abstrack**

*The increasing bacterial resistance caused by the inappropriate use of antibiotics has encouraged the development of natural products as safer alternative antibacterial agents. Arumanis mango leaves are known to contain secondary metabolites such as flavonoids, alkaloids, tannins, saponins, and triterpenoids, which potentially exhibit antibacterial activity. This study aimed to determine the antibacterial activity of the ethanolic extract of arumanis mango leaves (*Mangifera indica* L. var. *Arumanis*) against *Staphylococcus aureus*. This research was conducted a a laboratory experimental study, including plant determination, preparation of simplicia, extraction using the maceration method with 96% ethanol, phytochemical screening, and antibacterial activity testing using the disc diffusion method. Antibacterial testing was performed at extract concentrations of 5%, 10%, and 15%, with chloramphenicol as the positive control and DMSO as the negative control. Inhibition zones were observed after 24 hours of incubation at 37°C. The results showed that the ethanolic extract of arumanis mango leaves tested positive for alkaloids, flavonoids, tannins, saponins, and triterpenoids. The antibacterial assay revealed inhibition zones of 3.0 mm at 5% concentration, 4.38 mm at 10%, and 6.13 mm at 15%. The 5% and 10% concentrations exhibited weak antibacterial activity, while the 15% concentration showed moderate activity. The positive control produced an inhibition zone of 21.43 mm, whereas the negative control showed no antibacterial activity. In conclusion, the ethanolic extract of arumanis mango leaves possesses antibacterial activity against *Staphylococcus aureus*, with effectiveness increasing at higher extract concentrations. However, its inhibitory effect remains lower than that of the standard antibiotic.*

**Keywords:** *Arumanis mango leaves, antibacterial, Staphylococcus aureus, phytochemical, disc diffusion*