

## Comparison of Antimicrobial Activity of *Momordica cochinchinensis* and *Pinus kesiya* Extracts

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**Abstract :** In recent years, infectious diseases have increased considerably, and they are amongst the most common leading causes of death all over the world. Several medicinal plants are well known to contain active constituents such as flavonoids, carotenoids, and phenolic compounds, which are plausible candidates for therapeutic purposes. This study aimed to examine the antimicrobial activities of *M. cochinchinensis* and *P. kesiya* extracts using the agar disk diffusion method and broth microdilution to determine the minimum inhibitory concentration (MIC) value. In this study, *Momordica cochinchinensis* and *Pinus kesiya* extracts are investigated for antibacterial activity against *Staphylococcus aureus*. The results showed that *S. aureus* was susceptible to *P. kesiya* extracts with an MIC value of 62.5 µg/ml, while *M. cochinchinensis* showed MIC against *S. aureus* was greater than 2000 µg/ml. In summary, *P. kesiya* extract showed potent antibacterial activity against *S. aureus*, which could greatly value developing as adjuvant therapy for infectious diseases. However, further investigation regarding purification of the active constituents as well as a determination of the mechanism of antimicrobial action of *P. kesiya* active compound should be performed to identify the molecular target of the active compounds.

**Keywords :** antimicrobial activity, *Momordica cochinchinensis*, *Pinus kesiya*, *Staphylococcus aureus*

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