

[86]

ANTIMICROBIAL ACTIVITY OF *Thunbergia laurifolia* EXTRACT

Charatcharoenwitthaya K*

Mahidol University International Demonstration School, Thailand

*knnkantnatt@gmail.com

ABSTRACT

Infectious diseases are one of the notable threats that humans have faced in recent years. There are medicinal plants that possess important therapeutic activities that could be utilized to inhibit these bacterial growths. *Thunbergia laurifolia* is a popular Thai herb that possesses metabolic activities, including tannins, alkaloids, phenolic compounds, and flavonoids. The purpose of this study was to examine antimicrobial activities of *T. laurifolia* extract using agar disk-diffusion method and broth microdilution to determine the minimum inhibitory concentration (MIC) value. In addition, *T. laurifolia* leave extract was studied antimicrobial activities against Gram-positive *Staphylococcus aureus* and Gram-negative *Salmonella typhi*, and *Candida albicans*. The results showed that *S. aureus* were susceptible to *T. laurifolia* extract with MIC value of 1.950 mg/ml while *Salmonella typhi* and *Candida albicans* were less susceptible to *T. laurifolia* (MIC > 3 mg/ml). In conclusion, *T. laurifolia* extract showed promised antibacterial activity against *S. aureus*. The result from this study provides an insightful knowledge on antimicrobial activity which would lead to further development of an effective formula of *T. laurifolia* for gram-positive bacterial infection. Our findings can help enhance public health and contribute to global anti-microbial resistance issue.

Keywords: Antimicrobial activity, *Staphylococcus aureus*, *Thunbergia laurifolia*