

**PHYTOCHEMICAL SCREENING OF BELALAI GAJAH  
(*Clinacanthus nutans*) AND ITS ANTIBACTERIAL ACTIVITY**

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Partial Fulfilment of the Requirements for the  
Degree of Bachelor of Science (Hons.) Chemistry  
In the Faculty of Applied Sciences  
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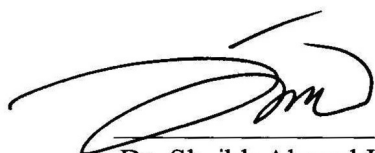


This Final Year Project Report entitled “**PHYTOCHEMICAL SCREENING OF BELALAI GAJAH (*Clinacanthus nutans*) AND ITS ANTIBACTERIAL ACTIVITY**” was submitted by Nur Musfirah Binti Suhaimi, in partial fulfillment of the requirements for the Degree of Bachelor of Science (Hons.) Chemistry, in the Faculty of Applied Sciences, and was approved by



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## ABSTRACT

### PHYTOCHEMICAL SCREENING OF BELALAI GAJAH (*Clinacanthus nutans*) AND ITS ANTIBACTERIAL ACTIVITY

This study point out the phytochemical analysis and the antibacterial activity of a medicinal plant, *Clinacanthus nutans* (*C. nutans*). The sample were extracted using cold extraction method with different polarity of solvent such as hexane, ethyl acetate and methanol. Phytochemical analysis was determined through foam test, ferric chloride test, lead acetate test and alkaloids test. Antibacterial activity was analyze by disc diffusion method using *Salmonella typhi* (*S. typhi*), *Staphylococcus aureus* (*S. aureus*), *Escherichia coli* (*E. coli*), and *Bacillus subtilis* (*B. subtilis*). Phytochemical analysis for the hexane extract show the positive result for alkaloid and saponins. While the methanol extract indicates the present of flavonoid and saponins. However, the ethyl acetate extract show no significant phytochemical constituents. Apart from that, antibacterial activity show methanol crude extract give a highest inhibition against *S. aureus*. This show that *C. nutans* has a possible benefit to be antibacterial agent.