

**PHYTOCHEMICAL SCREENING AND  
ANTIBACTERIA ACTIVITY OF *ZINGIBER  
OFFICINALE***

**SALAMI ASYIQIN BINTI SULIANO**

**BACHELOR OF SCIENCE (Hons.) CHEMISTRY  
FACULTY OF APPLIED SCIENCES  
UNIVERSITI TEKNOLOGI MARA**

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Dr Rohaiza Binti Saat  
Supervisor  
B. Sc. (Hons.) Chemistry  
Faculty of Applied Sciences  
Universiti Teknologi MARA  
Cawangan Negeri Sembilan,  
Kampus Kuala Pilah 72000,  
Kuala Pilah, Negeri Sembilan.

---

Sheikh Ahmad Izaddin Sheikh Ahmad  
Ghazali  
Project Coordinator  
B. Sc. (Hons.) Chemistry  
Faculty of Applied Sciences  
Universiti Teknologi MARA  
Cawangan Negeri Sembilan  
Kampus Kuala Pilah, 72000  
Kuala Pilah, Negeri Sembilan

---

Mazni Musa  
Head of Programme  
B. Sc. (Hons.) Chemistry  
Faculty of Applied Sciences  
Universiti Teknologi MARA  
Cawangan Negeri Sembilan  
Kampus Kuala Pilah, 72000  
Kuala Pilah, Negeri Sembilan.

Date: \_\_\_\_\_

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## ABSTRACT

### PHYTOCHEMICAL SCREENING AND ANTIBACTERIA ACTIVITY OF *ZINGIBER OFFICINALE*

The *Zingiber officinale* phytochemical screening and antibacterial activity have been studied. The rhizome of the *Zingiber officinale* are extracted by three different solvent which are hexane, ethyl acetate and methanol by using the cool extraction method. The extract are been dried by the rotary evaporator and the percentage yield of the extracted crude are been calculated. The phytochemical screening are been tested for the alkaloid test, flavonoid test, terpenoid test and phenol test using the methanol crude extract which are aimed to extract the plant and to perform the phytochemical screening on the extracted sample. Thin layer chromatography (TLC) in combination with a variety of solvent systems were used to determine the profile of the sample extract. The bacteria that employed for Gram positive are *Bacillus subtilis* and *Staphylococcus aureus* while for Gram negative are *Escherichia coli* and *Salmonella sp.* Antibacterial tests on samples of the extracts were tested using the disk diffusion method. Antibacterial assay results showed that the crude methanol extract of *Escherichia coli* give the highest inhibition diameters which is 11 mm and the lowest activity in crude hexane extract against *Staphylococcus aureus* which is 2 mm.