

**PHYTOCHEMICAL SCREENING AND ANTIBACTERIA
ACTIVITY OF *CURCUMA DOMESTICA***

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ABSTRACT

PHYTOCHEMICAL SCREENING AND ANTIBACTERIA ACTIVITY OF *CURCUMA DOMESTICA*

The aim of this study are to extract the plant, to carry out the phytochemical screening, to determine the TLC profile of the extracted sample and to screen the antibacterial activity of the plant crude. Ground of rhizome *Curcuma domestica* were extracted by using cool extraction method at room temperature. Extractions were done successively by using three solvent which are hexane, ethyl acetate and methanol. Each extraction was evaporated using rotary evaporator to produce crude extract. The phytochemical screening of *Curcuma* species has been studied. Phytochemical compound such as alkaloid, phenol, terpenoids and flavonoid were detected by using different test on methanolic extract. Suitable combination of solvent system was chosen to determine the TLC profile using thin layer chromatography method. Antibacteria activities were tested using four bacteria strain against three extract by using disc diffusion method. Bacteria that employed for Gram positive are *Escherichia coli* and *Salmonella species*, while the Gram negative bacteria are *Bacillus subtilis* and *Staphylococcus aureus*. The highest antibacteria activities observed was the methanol extract against *Escherichia coli* with 13 mm and the lowest antibacterial activities observed was the hexane extract against *Staphylococcus aureus* with only 1 mm.