PHYTOCHEMICAL SCREENING AND BIOACTIVITY STUDY OF *Murraya koenigii* LEAVES

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ABSTRACT

PHYTOCHEMICAL SCREENING AND BIOACTIVITY STUDY OF *Murraya koenigii* LEAVES

M. koenigii or well known as curry leaves which come from Rutaceae family can be easily obtained from anywhere throughout Malaysia. It is one the Murraya species which can be obtain in Malaysia. *M. koenigii* have a lot of biological effect on health such as antibacterial antioxidant. Hexane, chloroform and methanol has been used to extract the *M. koenigii* using maceration method. The extraction started from the solvent of lowest polarity which is hexane followed by chloroforom and methanol respectively. The highest percent of yield between the three crude extracts gained was methanol with 5.07 %. Using the crude extracts, the phytochemical screening, TLC and their bioactivity study which is antibacterial has been performed. From the result, the best separation for hexane, chloroform and methanol crude extracts can be observed at chloroform : ethyl acetate (4:1) , hexane : ethyl acetate (4:1) and chloroform : ethyl acetate (3:2) respectively. The phytochemical screening was performed to test the presence of flavonoid, alkaloid, tannins, saponins and terpenoid in each crude extract. The hexane crude extract contained only flavonoid and alkaloid while chloroform contained only alkaloid. All phytochemical screening tested were present in the methanol crude extract except flavonoid. For the antibacterial study, the methanol crude extract showed the highest inhibition zone against *Staphylococcus aureus, Bacillus subtilis, Escherichia coli and Salmonella thypi.*